



FLUOR DANIEL GTI

US EPA RECORDS CENTER REGION 5



534053

(4)

SITE SUMMARY REPORT
DIESEL FUEL RECOVERY ACTIVITIES
CONSOLIDATED RAIL CORPORATION
BOTSFORD YARD
KALAMAZOO, MICHIGAN

RECEIVED

Project Number: 04002-0323

June 17, 1996

JUN 21 1996

ERD - Plainwell

Prepared for:

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Fluor Daniel GTI, Inc.

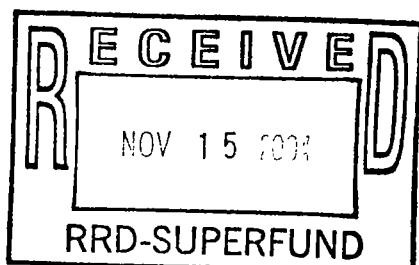
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1.0 INTRODUCTION

This report presents a summary of investigative and remedial activities conducted at the Consolidated Rail Corporation (Conrail) Botsford Yard in Kalamazoo, Michigan since the Site Summary Report dated March 29, 1995. These activities were performed in response to the periodic historical appearance of separate phase hydrocarbons on the surface of the Kalamazoo River, located at the southern boundary of the site (Figure 1, Site Location Map and Figure 2, Site Map).

Specific investigative and remedial activities that are summarized in this report include:

- the cumulative recovery of over 15,545 gallons of diesel fuel from the Mills Street Recovery Trench;
- the cumulative recovery of 990 gallons of diesel fuel from sump S-04 (noted as S-05 in the previous report);
- the cumulative recovery of 41 gallons of diesel fuel from MW-20;
- ongoing maintenance of the sorbent boom system deployed in the Kalamazoo River; and
- the results of the Geoprobe investigation conducted in the vicinity of sums S-04 and S-05.

Since startup of the Mills Street Recovery Trench on October 5, 1993 (and through May 21, 1996) a total of 16,576 gallons of diesel fuel have been recovered from the subsurface at the Botsford Yard. Of that, 4,264 gallons have been recovered since the last report dated March 29, 1995. Fuel recovery is continuing from the Mills Street Recovery Trench, sump S-04, and MW-20.

A summary of current conditions regarding diesel fuel thickness in the monitoring wells is also presented.



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2.0 DIESEL FUEL RECOVERY PROGRAM

2.1 Mills Street Recovery Trench

Fluor Daniel GTI has conducted weekly site inspections since the last report dated March 29, 1995 to monitor the diesel fuel removal progress at each of the recovery wells containing a large diameter filter scavenger. At present, filter scavengers are deployed in RW-2, RW-3, RW-4, and RW-5. Figure Y1 depicts the details of the trench construction.

During each site visit, Fluor Daniel GTI technicians gauge the depth to groundwater and diesel fuel in each recovery well, as well as MW-20, S-04, and S-05. Also noted is the volume of diesel fuel recovered from each well. The filter scavengers are also inspected, and if necessary, cleaned on a monthly basis. On a quarterly basis, the depth to water and diesel fuel are measured in each of the site monitoring and recovery wells.

2.2 Additional Diesel Fuel Recovery Measures

An additional large diameter filter scavenger (5 total on site) was placed in sump S-04 during September 1994. This filter scavenger has been operated continuously since the last report dated March 29, 1995. As with the Mills Street Recovery Trench, the diesel fuel is pumped into an above-ground polyethylene tank placed directly adjacent to the sump. Periodically, the tank contents are transferred into the same tank car utilized for the Mills Street Recovery Trench system.

Weekly hand bailing of the diesel fuel noted in MW-20 was initiated in December 1994. That diesel fuel is placed in the poly tank dedicated to sump S-04.

Sorbent booms and pads are also maintained in the Kalamazoo River immediately adjacent to sump S-04 (Figure 2) and the outfall for the newly-installed storm sewer beneath the Mills Street bridge. Maintenance of the sorbent boom system in the Kalamazoo River is being maintained on a bimonthly basis by Conrail subcontractors.



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2.3 Diesel Fuel Recovery Volumes

Since the initiation of diesel fuel recovery from the Mills Street Recovery Trench on October 5, 1993, 16,576 gallons of diesel fuel have been recovered from the subsurface. In gallons, the breakdown is as follows:

	Since Last Report	Cumulative
■ Mills Street Recovery Trench (RWs 1-5)	3,380	15,545
■ Sump S-05	860	990
■ MW-20 (hand bailing)	24	41
Total Recovery:	4,264	16,576

Appendix A contains the diesel fuel recovery statistics for the site. Also in Appendix A is a graph depicting the cumulative diesel fuel recovery for the Mills Street trench, as well as a calculated estimate of the volume of diesel present in the trench during each of the gauging events. Since March 1995, the rate of diesel fuel recovery from the site has averaged 355 gallons per month.

The volume of diesel fuel present in the trench peaked in May 1994 (3,602 gallons) and has fallen to a fairly steady volume since that time (typically less than 500 gallons). This data, derived from the measured thickness of diesel fuel in each recovery well, is used to determine whether excess fuel is present in the trench. There was a peak in the fuel volume during November-December 1995 (pumps were off for repair and system upgrade); during January 1996, the recovery of fuel was resumed and the volume in the trench decreased immediately.

2.4 Site Gauging Data

Appendix B contains hydrographs of the recovery wells, as well as monitoring wells MW-03, MW-07, MW-09, MW-10, MW-11, MW-12, MW-18, and MW-20. A brief discussion of each hydrograph (or group of hydrographs) is provided below:

Recovery Wells: These are all shown on one page; the purpose of which is to show that the diesel fuel thickness has remained relatively low (<0.1 feet) since the inception of diesel fuel recovery from each of the wells. On average, the water levels fluctuate from between 754 and 756 feet above sea level; it is likely that this is related to the nearby Kalamazoo River. An increase in the thickness of diesel fuel in each of the wells may be seen during late 1995 (corresponding with the system shut-down for upgrading); however, the thickness returned to near zero once the system was returned to operation in January.



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Sump S-04:

The thickness of diesel in sump S-04 has fluctuated from roughly 0.25 feet to nearly negligible since the initiation of product recovery in September 1994. In general, the overall water table elevation fluctuates from 755 and 757 feet above sea level.

MW-3 and MW-18:

These two monitoring wells are located immediately adjacent to the Mills Street Recovery Trench (Figure 2). Although both wells have historically exhibited a measurable thickness of diesel fuel, the diesel fuel thickness in each well has shown a decrease since the inception of diesel fuel recovery from the Mills Street Recovery Trench (between 1/31/93 and 10/28/95 as shown on the X-axis of each hydrograph).

Prior to initiating recovery from the Mills Street Recovery Trench, the apparent diesel fuel thickness in MW-3 averaged 1.13 feet. During the gauging event on February 13, 1996, the thickness of diesel fuel in MW-3 is 0.03 feet. The pre-trench thickness in MW-18 averaged 1.76 feet; in the three gauging events since April 1995, the fuel thickness has averaged 0.38 feet.

MW-7 and MW-11:

These two monitoring wells are located immediately to the south (MW-7) and north (MW-11) of the former roundhouse (Figure 2). Prior to initiating recovery from the Mills Street Recovery Trench, the apparent diesel fuel thickness in MW-7 averaged 1.58 feet; in the past twelve months, the average thickness has been 0.6 feet. The pre-trench thickness in MW-11 averaged 2.16 feet; in the past twelve months, the average thickness has been 2.15 feet.

MWs-9, 10, and 12:

These three monitoring wells are located within the central area of the site (Figure 2). Each has historically exhibited a measurable thickness of diesel fuel. Since the last update dated March 29, 1995, each well has shown a general decline in observed product thickness. The decline appears greatest in MW-9, which has decreased from just over 2 feet of diesel fuel in January 1995, to 0.24 feet in March 1996.

MW-20:

During 1996, the thickness of diesel fuel in MW-20 has averaged 1.73 feet. During 1995, the thickness averaged 1.0 feet. As this well is near the Kalamazoo River, the hand bailing initiated during December 1994 has continued through the present.

A table showing all of the gauging data collected from the site since December of 1989 is presented as Appendix C.



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3.0 GEOPROBE INVESTIGATION

3.1 Soil Boring Installation

To gain an increased understanding of the distribution of separate phase diesel fuel in the area of sump S-4, on December 11, 12, and 13, 1995, Fluor Daniel GTI personnel supervised the installation of twenty-two (22) soil borings using a Geoprobe drilling rig. Figure 2 depicts the location of each soil boring on the overall Site Map; Figure 4 is a larger scale map showing the area of investigation. Nine of the borings were completed as monitoring points using Four-foot lengths of galvanized well screen. The nine well points were placed in borings GP-2, GP-3, GP-6, GP-14, GP-16, GP-18, GP-20, GP-21, and GP-22. Through March 26, 1996, the well points have been gauged for the thickness of separate phase diesel fuel ten times since their installation in December 1995.

Soil samples were collected continuously from each boring using a four-foot sampling tube. Each sample was described for soil type and measured for the presence of volatile organic compounds (VOCs) using a photoionization device (PID). Due to the relatively low volatility of diesel fuel, it was not expected that headspace values would provide the primary evidence of the presence of the fuel. Rather, observed visual staining and gauging of the well points were used to determine the extent of impact.

The following table contains the depth at which each boring was terminated, the "zone of hydrocarbon saturation" (described below), the depth of the well point screen (if placed in the boring), the average depth-to-water in each well point (if applicable), and the average diesel fuel thickness in each well point (if applicable).

Geoprobe Point	Base of Exploration (ft*)	Zone of Hydrocarbon Saturation*	Depth of Screen (ft*)	Average Depth to Water (ft*)	Average Diesel Fuel Thickness (ft)
GP-1	12	NONE	----	---	---
GP-2	12	9.0 - 10.5	6.0 - 10	6	0
GP-3	11	3.5 - 8.0	7.0 - 11	8	0.66
GP-4	14	3.0 - 14	----	----	----
GP-5	12	5.0 - 12	----	----	----
GP-6	12	5.0 - 12	7.0 - 11	8	0
GP-7	11	1.0 - 5.0	----	----	----
GP-8	12	5.0 - 12	----	----	----



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Geoprobe Point	Base of Exploration (ft*)	Zone of Hydrocarbon Saturation*	Depth of Screen (ft*)	Average Depth to Water (ft*)	Average Diesel Fuel Thickness (ft)
GP-9	12	5.0 - 12	----	----	----
GP-10	9	5.0 - 9.0	----	----	----
GP-11	9	5.0 - 9.0	----	----	----
GP-12	9	5.0 - 9.0	----	----	----
GP-13	9	6.0 - 9.0	----	----	----
GP-14	12	NONE	7.0 - 11	9	0
GP-15	12	9.0 - 12	----	----	----
GP-16	12	9.0 - 11	7.0 - 11	9	0
GP-17	12	9.0 - 10	----	----	----
GP-18	12	9.0 - 10.5	6.0 - 10	9	0
GP-19	12	NONE	----	----	----
GP-20	14	8.0 - 14	9.0 - 13	11	0
GP-21	15	6.0 - 15	9.0 - 13	11	0
GP-22	12	NONE	7.0 - 11	8	0

* For clarity, all depths are compared against a common datum of the ground surface; actual gauging data is collected from the top of the well point casing.

3.2 Results

3.2.1 Geology

The soils encountered consisted primarily of very fine to medium grained sand and gravel from the surface to the terminus of each boring. Possible clay plugs were noted in borings GP-1, GP-2, GP-10, GP-12, GP-13, GP-18, and GP-19, however, they did not appear as a consistent and defined layer. Copies of the drilling logs are included as Appendix D.

3.2.2 Zone of Hydrocarbon Saturation

Using visual inspection, the thickness of the zone of diesel fuel staining was noted on each well log. In general, the zone of hydrocarbon staining was pronounced, and corresponded generally to the highest headspace readings. Also, the zone was always noted at roughly the depth of the water table.



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Of note is the lack of hydrocarbon staining in soil borings GP-1, GP-14, GP-19, and GP-22. These borings are located in the southeastern area of the investigation. All other borings had varying thicknesses of hydrocarbon staining, ranging from one and one-half feet (GP-2) to eleven feet (GP-4).

3.2.3 Well Point Diesel Fuel Thickness

Each well point has been gauged for the thickness of separate-phase diesel fuel ten times since their installation in December 1995. Of the nine well points, only GP-3 has a measurable thickness of diesel fuel (average of 0.66 feet). GP-3 is located roughly fifty feet upgradient of MW-20, a monitoring well that exhibits a measurable thickness of diesel fuel.

3.3 General Observations on the Geoprobe Results

Thus far, the Geoprobe results have showed the presence of hydrocarbon staining of the subsurface soils, generally at the elevation of the water table. However, it has not revealed the presence of a consistent thickness of separate phase diesel fuel on the water table. A review of historical records (including MDNR files), indicates that Penn Central Transportation Company installed and operated a recovery trench located parallel to the Kalamazoo River in June 1973 for the sole purpose of recovering diesel fuel. In a letter from the Michigan Water Quality Division dated January 24, 1978, it was stated that 122,250 gallons oil had been removed; presumably since June 1973.

Detailed construction records of the recovery trench installed by Penn Central have yet to be located. As such, it is difficult to determine where these efforts were made, although it would appear they are related to the larger diameter recovery sumps located throughout the yard. Sumps S-4 and S-5 located near the Kalamazoo River and are likely related to the trench. It is likely that the observed hydrocarbon staining on the soil is residual fuel, left as the unrecoverable portion of the fuel that has since been recovered from the subsurface during the historical effort made by Penn Central and subsequently, Conrail.



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4.0 CONCLUSIONS

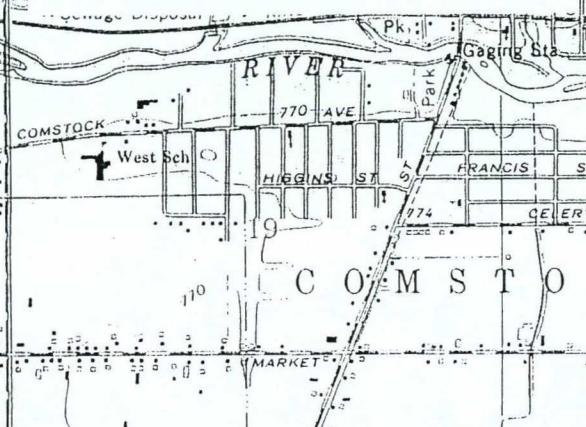
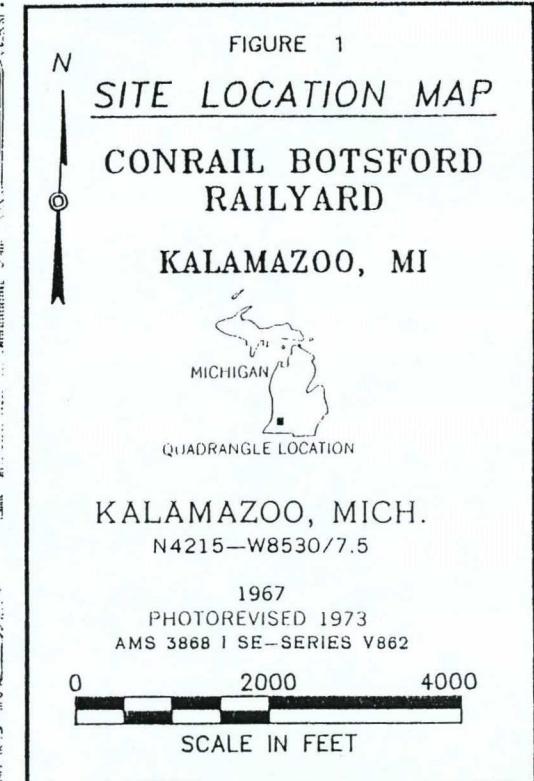
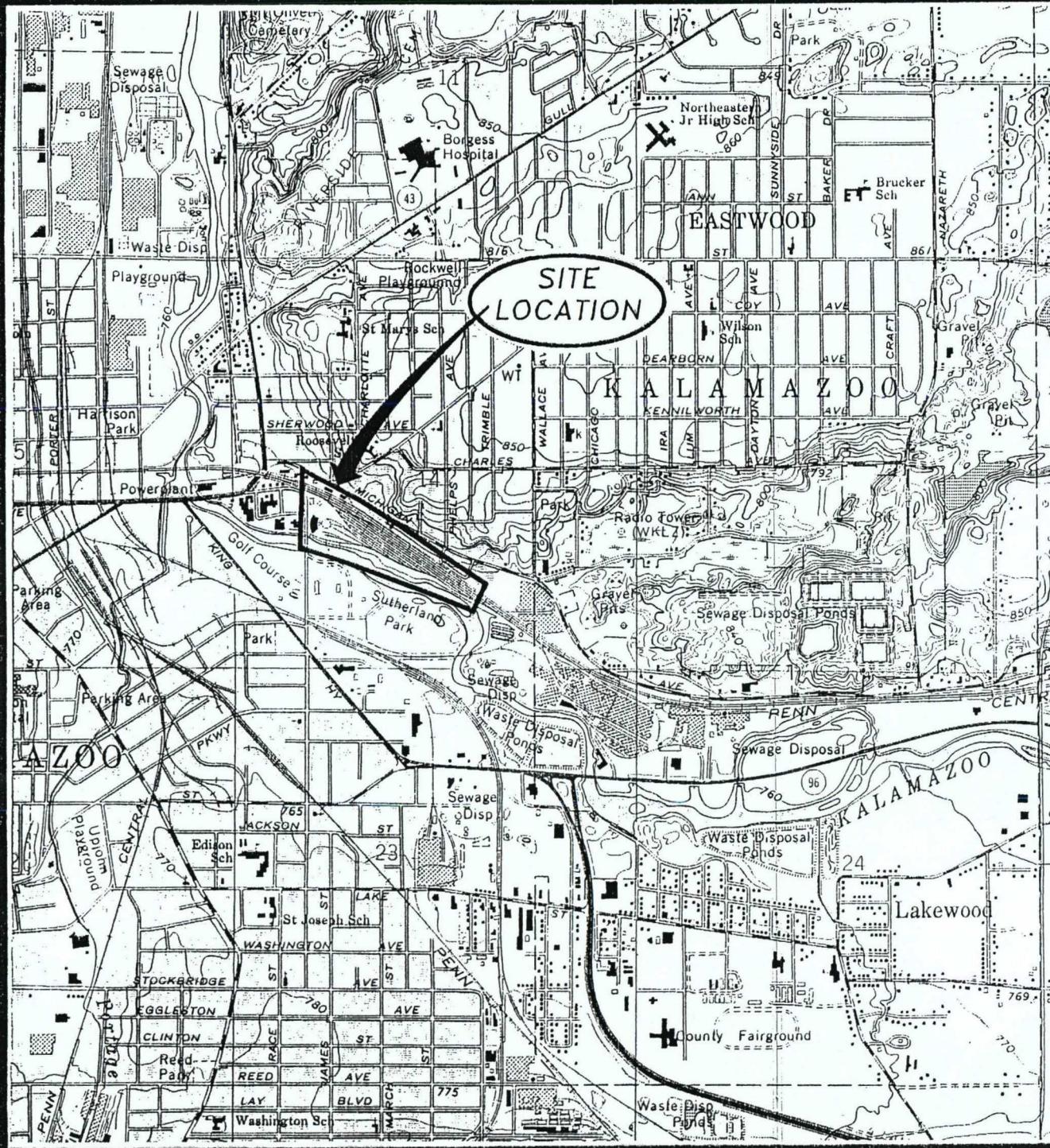
The remedial measures taken to increase the recovery of diesel fuel from the subsurface at the Botsford Yard have been successful. The Mills Street Recovery Trench has recovered 16,576 gallons of diesel fuel since its' installation and startup in October 1993. At present, fuel is recovered from the trench at an approximate rate of 355 gallons per month.

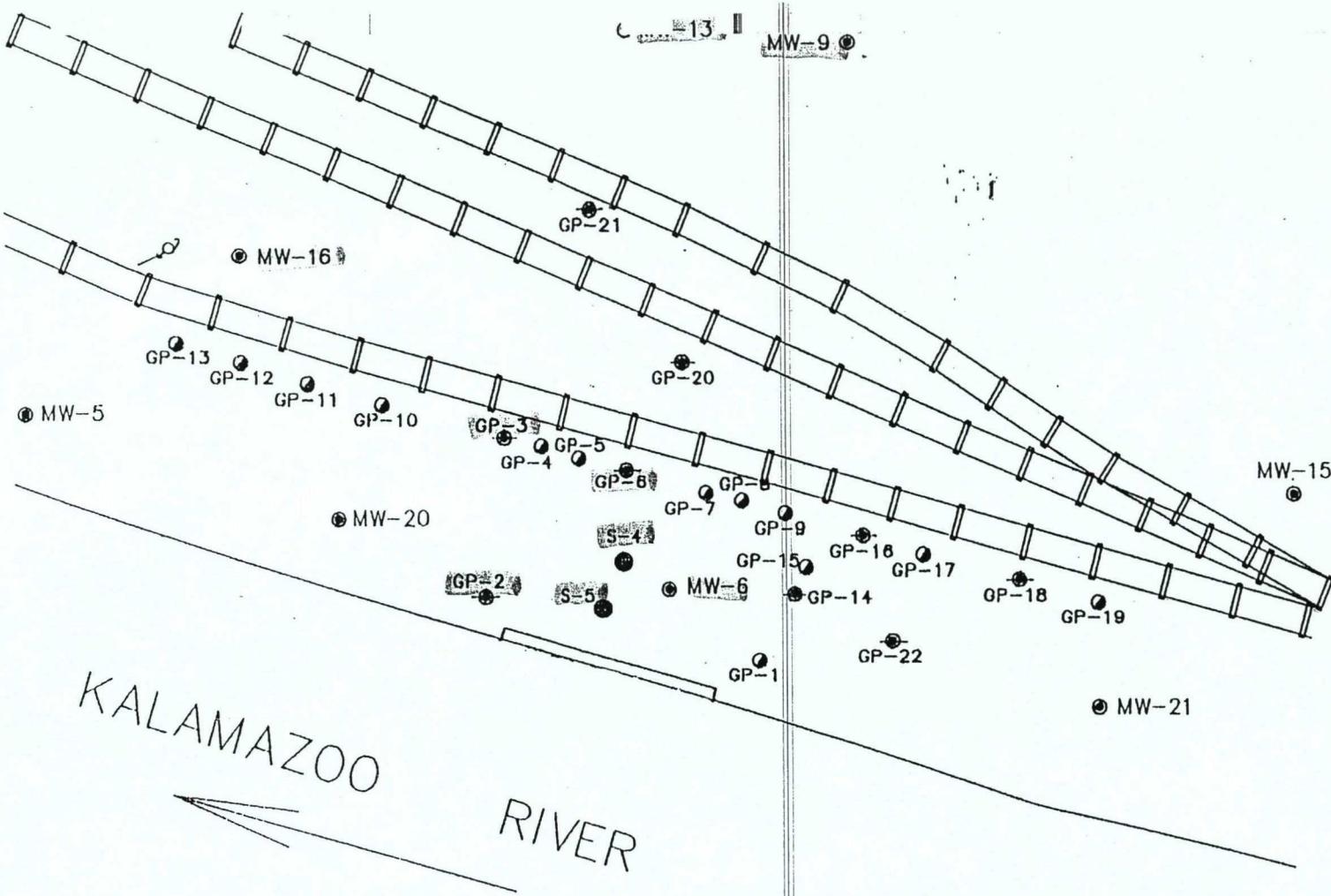
The removal of diesel fuel from the Mills Street Recovery Trench has affected the thickness of diesel fuel in monitoring wells MW-3 and MW-18. Both of these wells have shown a decrease in the apparent thickness of diesel fuel (MW-3 is currently at 0.03 feet), demonstrating the effectiveness of the trench at recovering fuel.

Since the inception of diesel fuel recovery from Sump S-04 in October 1994 and hand bailing from MW-20 in December 1994, the volume of diesel fuel removed from each well has been 990 gallons and 41 gallons, respectively.

The results of the Geoprobe investigation in the vicinity of sump S-4 have demonstrated that no continuous layer of separate phase diesel fuel exists in this area of the site. The investigation did reveal significant hydrocarbon staining on subsurface soils near the water table, which is likely unrecoverable (residual) oil remaining in the subsurface after the oil recovery efforts of Penn Central ceased.

Future activities at the site should be focussed on maintaining operation of the filter scavengers in the Mills Street Recovery Trench and sump S-4. Also, using the results of the Geoprobe investigation and historical data regarding the prior efforts of Penn Central, a plan will be developed and implemented to recover the remaining pockets of diesel fuel in the area of sump S-4.

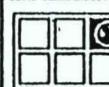




LEGEND

- - GEOPROBE POINT
- - MONITORING WELL
- ◐ - GEOPROBE WELL SET
- ◑ - SUMP

0 50 100
SCALE FEET



GROUNDWATER
TECHNOLOGY

PROJECT NO.:	ACAD FILE:	DRAWING DATE:
04301-0122	6001-Y3	01-03-96

DESIGNED:

DGN

DETAILED:

YMB

CHECKED:

CHK

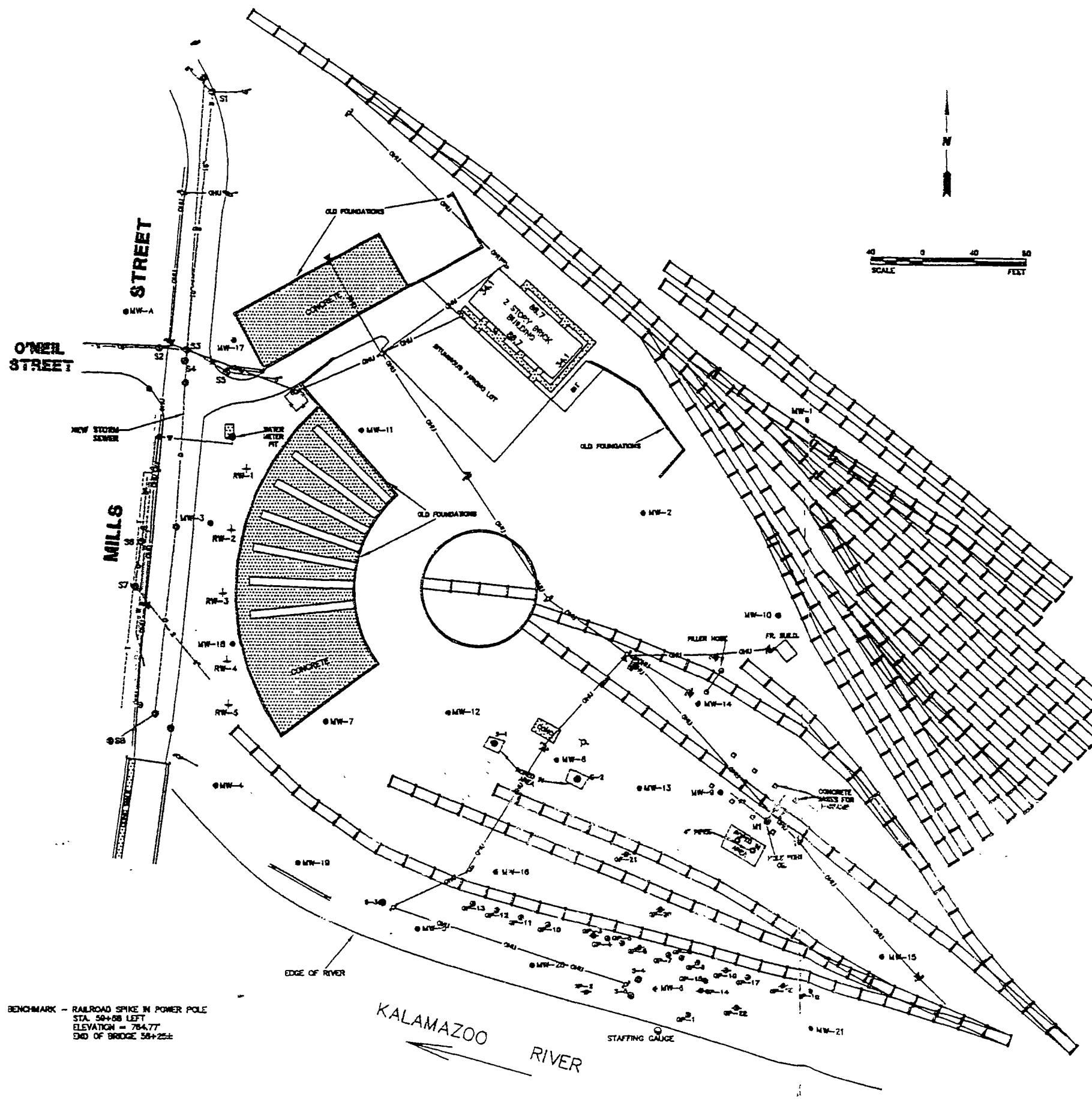
GEOPROBE LOCATION MAP

CLIENT/LOCATION:
CONRAIL/BOTSFORD YARD
KALAMAZOO, MI.

FIGURE:
4

STRUCTURE INVENTORY

	RIM ELEVATION	SIZE	DIRECTION	INVERT ELEVATION
DRAINAGE	01	762.48	36° SOUTH	756.34
			36° SOUTH	756.33
			15° NORTHWEST	756.33
CURB INLETS	02	763.38	15° NORTH	754.31
			15° SOUTH	754.31
SANITARY	03	763.72	36° NORTH	755.73
			36° SOUTH	755.73
MISC.	01	762.43	12° EAST	757.73
	C2	762.72	12° WEST	757.42
	S1	762.51	15° SOUTH	755.61
S1			15° EAST	755.61
			15° NORTHWEST	755.61
S2	02	762.70	18° EAST	753.90
			18° WEST	753.90
S3	03	763.08	12° SOUTH	757.71
			15° SOUTH	755.08
			9° EAST	756.96
			15° WEST	754.28
S4	04	763.20	12° NORTH	757.90
			9° WEST	758.57
S5	05	764.42	9° EAST	758.74
			9° NORTH	755.85
S6	06	763.77	9° NORTH	751.95
			9° SOUTH	755.85
S7	07	764.12	9° NORTH	758.12
			9° SOUTHEAST	757.97
S8	08	765.04	TOP OF OILY WATER	753.04
			TO BOTTOM	754.04
M1	09	766.14	NO PIPES VISIBLE	
			NORTHWEST	765.28
			NORTHEAST	765.28



WELL ELEVATIONS

WELL #	ELEVATION TOP OF GROUND	ELEVATION TOP OF RIM	ELEVATION TOP OF PVC	COORDINATES NORTH/EAST
1	766.2	768.28	767.93	1943.1 2411.9
3	768.2	767.57	767.27	1864.9 1955.1
4	762.1	764.34	764.16	1687.0 1980.0
5	761.7	764.41	764.06	1586.7 2153.7
6	762.4	764.85	765.59	1511.6 2296.8
7	768.3	769.46	762.13	1715.4 2044.8
8	766.3	769.34	768.07	1685.8 2221.5
9	767.1	769.41	769.23	1681.0 2346.7
10	764.1	768.55	768.11	1704.1 2380.3
11	769.1	770.18	769.98	1835.6 2071.2
12	766.8	769.03	768.85	1721.5 2138.3
13	767.2	769.14	768.83	1864.2 2263.8
14	766.0	765.97	765.79	1727.3 2228.1
15	763.1	767.32	767.08	1537.5 2471.5
16	764.9	766.94	765.78	1801.5 2176.6
17	764.1	766.48	765.31	2003.6 1972.2
18	763.6	766.04	767.25	1773.3 1972.4
20	762.0	764.08	763.80	1808.9 2022.5
21	761.4	763.73	761.44	1530.2 2203.3
A	762.3	764.62	764.34	1479.7 2417.5
21	761.7	765.03		2024.6 1689.5

PASSIVE RECOVERY SUMPS

#	RIM ELEVATION
S-1	766.71
S-2	767.75
S-3	764.01
S-4	762.98
S-5	762.53

LEGEND

- RAILROAD TRACKS
- BURIED GAS LINES AS MARKED BY UTILITY COMPANY
- BURIED WATER LINES AS MARKED BY UTILITY COMPANY
- BURIED TELEPHONE LINES AS MARKED BY UTILITY COMPANY
- BURIED DRAWDOWN LINES
- BURIED SANITARY LINES
- OVERHEAD UTILITY LINES
- MONITOR WELL
- RECOVERY WELL
- GEOPROBE POINT
- GEOPROBE WELL SET
- CURB INLET
- SANITARY MANHOLE
- DRAINAGE MANHOLE
- MANHOLE
- WATER VALVE
- HYDRANT
- UTILITY POLE
- UTILITY POLE WITH LIGHT
- FENCE LINE
- BILLBOARD
- CONCRETE AREA
- SPOT ELEVATION
- TELEPHONE PEDESTAL
- ELECTRIC MANHOLE
- WATER METER PIT

 GROUNDWATER TECHNOLOGY

2333 RESEARCH DRIVE
FARMINGTON HILLS, MI 48336 (248) 477-0726

CONRAIL
BOTSFORD YARD

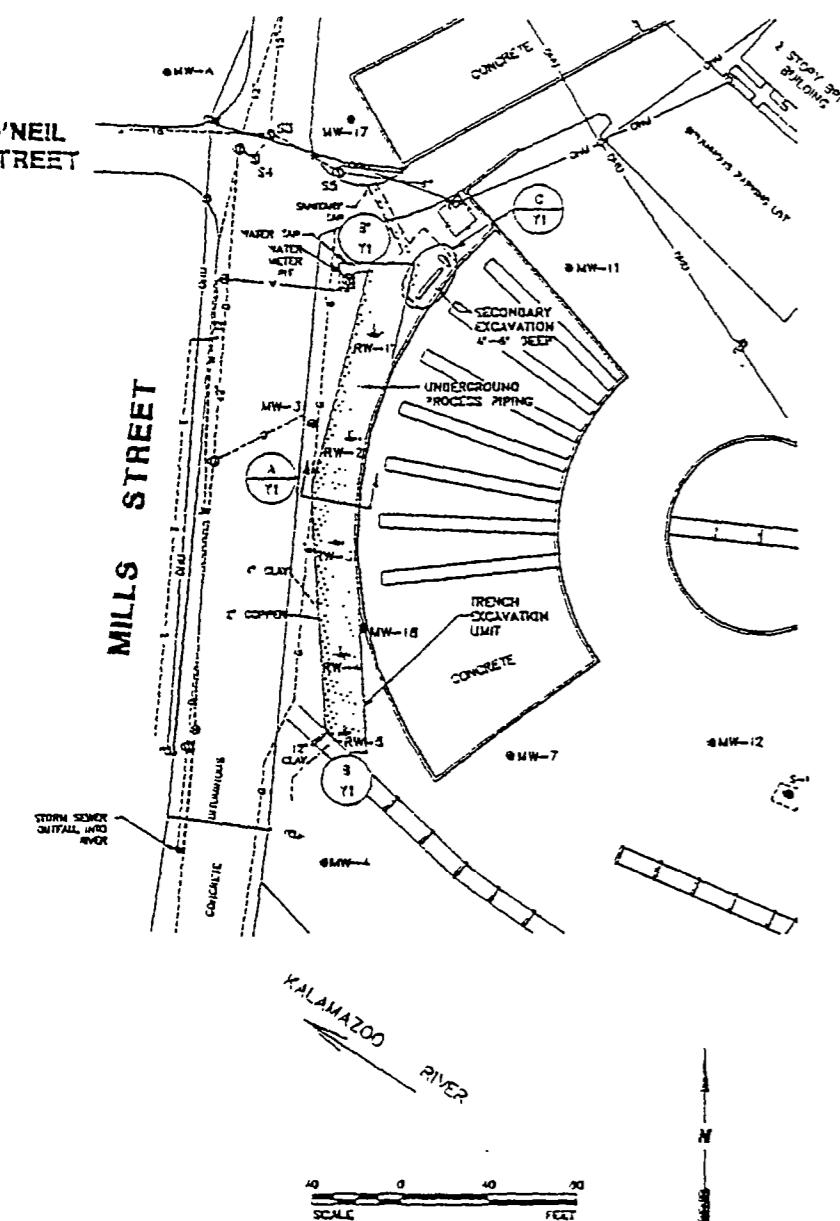
75 MILL STREET
KALAMAZOO, MICHIGAN 49007

SITE MAP

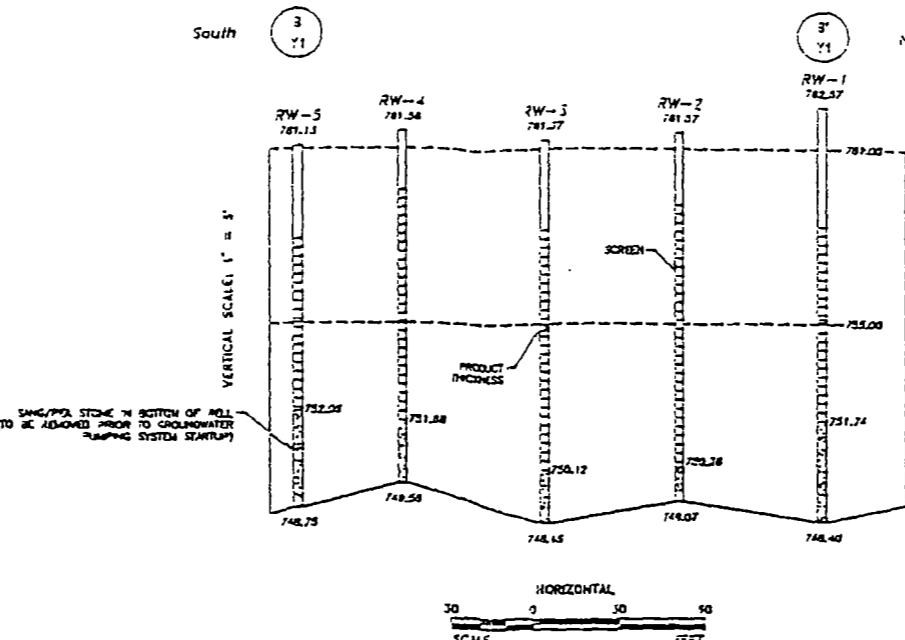
DESIGNED BY	DETAILED BY	CHECKED BY
BB	NLW	
DRAWING DATE:	ACAD FILE:	
6-23-93	5001-Y1	
PROJECT NO.:	CONTRACT:	
34301 0122		
DRAWING:	REVISION:	

Butfield Engineering, Inc.
Surveyors & Engineers
530 Main Street
BATTLE CREEK, MI 49017
(616) 322-4007

FIGURE 2



CROSS SECTION B - 3'

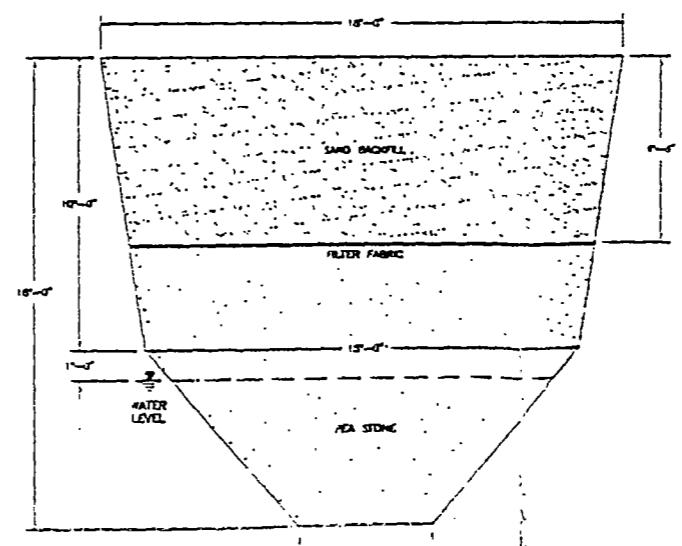
PRODUCT RECOVERY STARTUP DATE
OCTOBER 2, 1983

WELL #	DEPTH TO PRODUCT	DEPTH TO WATER	PRODUCT THICKNESS
RW-1	7.38'	7.44'	0.06"
RW-2	4.40'	5.64'	1.24"
RW-3	4.23'	5.47'	1.24"
RW-4	4.42'	5.57'	1.15"
RW-5	4.14'	5.18'	1.04"

ELEVATIONS MEASURED ON 10-1-83 AT 10:30 AM
300 GALLONS RECOVERED

WELL #	DEPTH TO BOTTOM FORCE WELL (SAND)	DEPTH CUT OFF TOP OF WELL
RW-1	10.65'	4.25"
RW-2	11.21'	7.05"
RW-3	11.25'	7.05"
RW-4	9.65'	3.05"
RW-5	9.65'	4.75"

NOTES:
 RW-1, RW-2, RW-3, AND RW-4 WERE ORIGINALLY
 30.00 FEET LONG.
 RW-1 WAS CUT TO BE 10.25 FEET.
 RECOVERY WELLS WERE CONSTRUCTED WITH 24" X 4"
 GALVANIZED CULVERT.

PIPING DETAIL C
NOT TO SCALE

SIGNATURE	DATE
REVIEW ENGR:	
PROJECT CHIEF:	
PROJECT MGR:	
CLIENT:	

GROUNDWATER
TECHNOLOGY

105 23RD STREET SE
GRAND RAPIDS, MI 49503 (616) 246-4455

COMRAIL
BOTSFORD YARD

76 MILLS STREET
KALAMAZOO, MI 49001

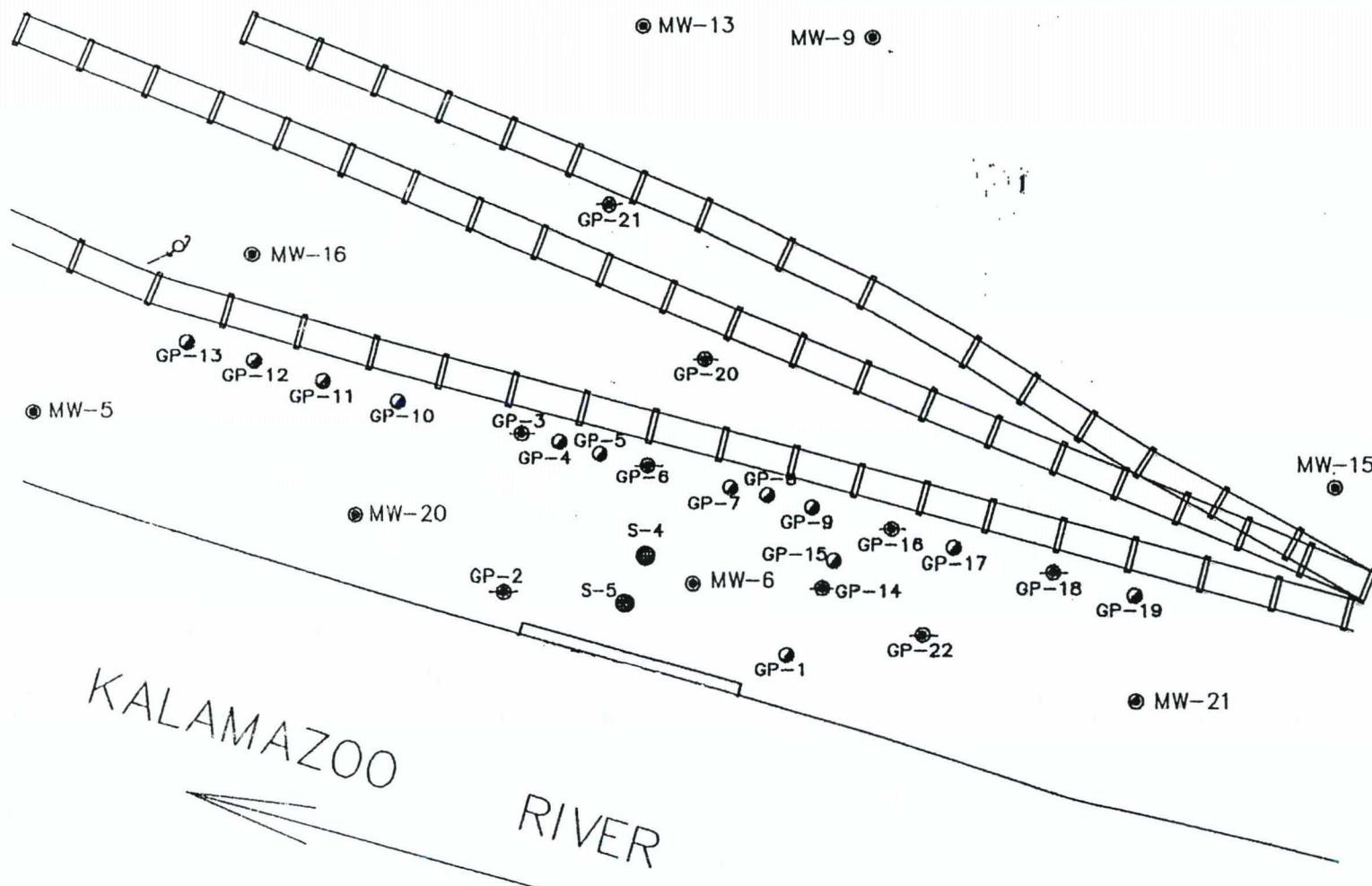
MILLS STREET
RECOVERY TRENCH PROJECT
AS BUILT & PIPING DETAIL

DESIGNED BY: DETAILED BY: CHECKED BY:
JMP HNW WHB

DRAWING DATE: ACAD FILE:
10-22-83 0122-A52

PROJECT NO.: CONTRACT:
04301 0122

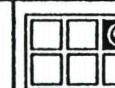
DRAFTER: REVISION:
Y1



LEGEND

- — GEOPROBE POINT
- — MONITORING WELL
- ◎ — GEOPROBE WELL SET
- — SUMP

0 50 100
SCALE FEET



GROUNDWATER
TECHNOLOGY

PROJECT NO.: 04301-0122	ACAD FILE: 6001-Y3	DRAWING DATE: 01-03-96
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DESIGNED:
DGN

DETAILED:
YMB

CHECKED:
CHK

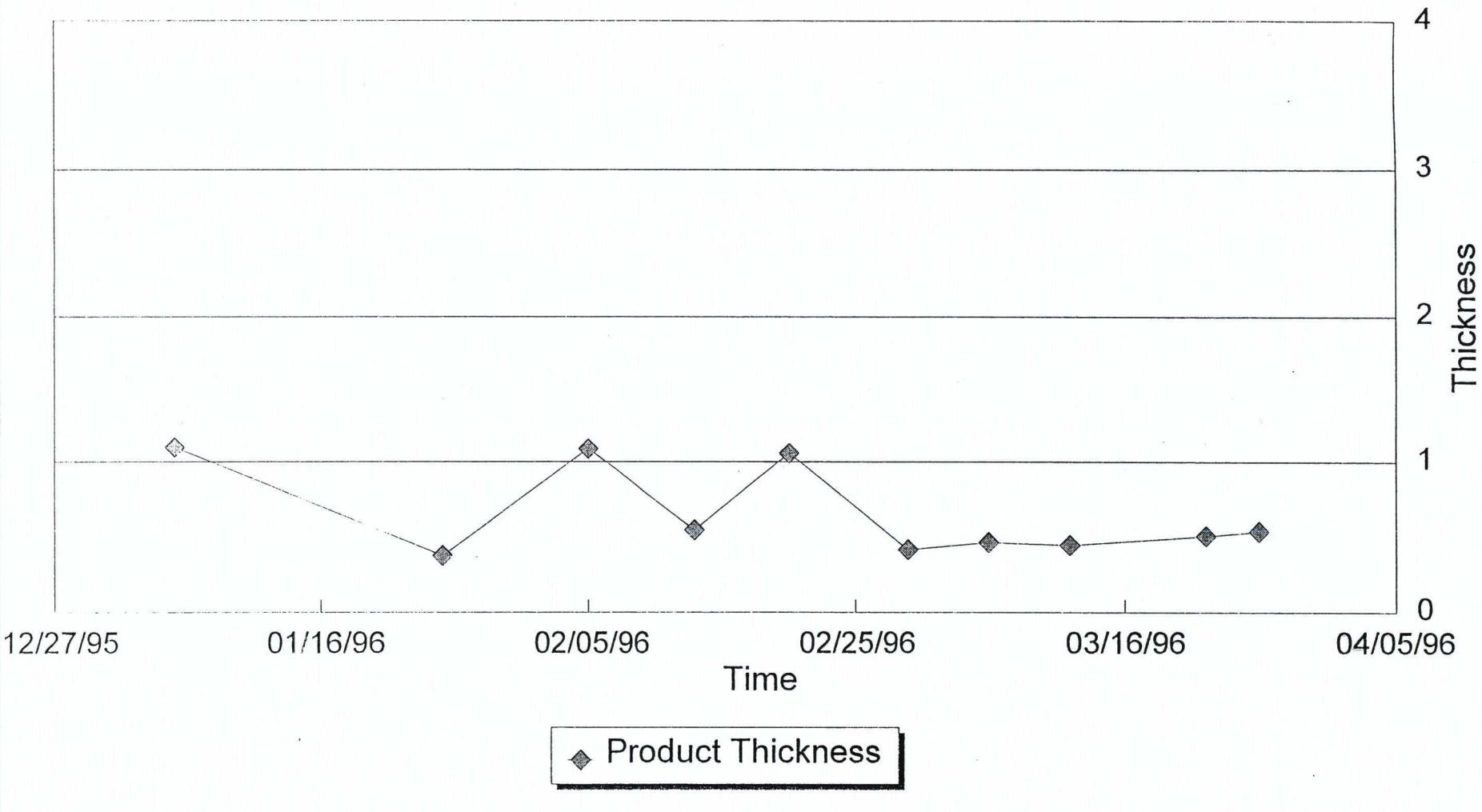
GEOPROBE LOCATION MAP

CLIENT/LOCATION:
CONRAIL/BOTSFORD YARD
KALAMAZOO, MI.

FIGURE:
4

Geoprobe Point GP-03

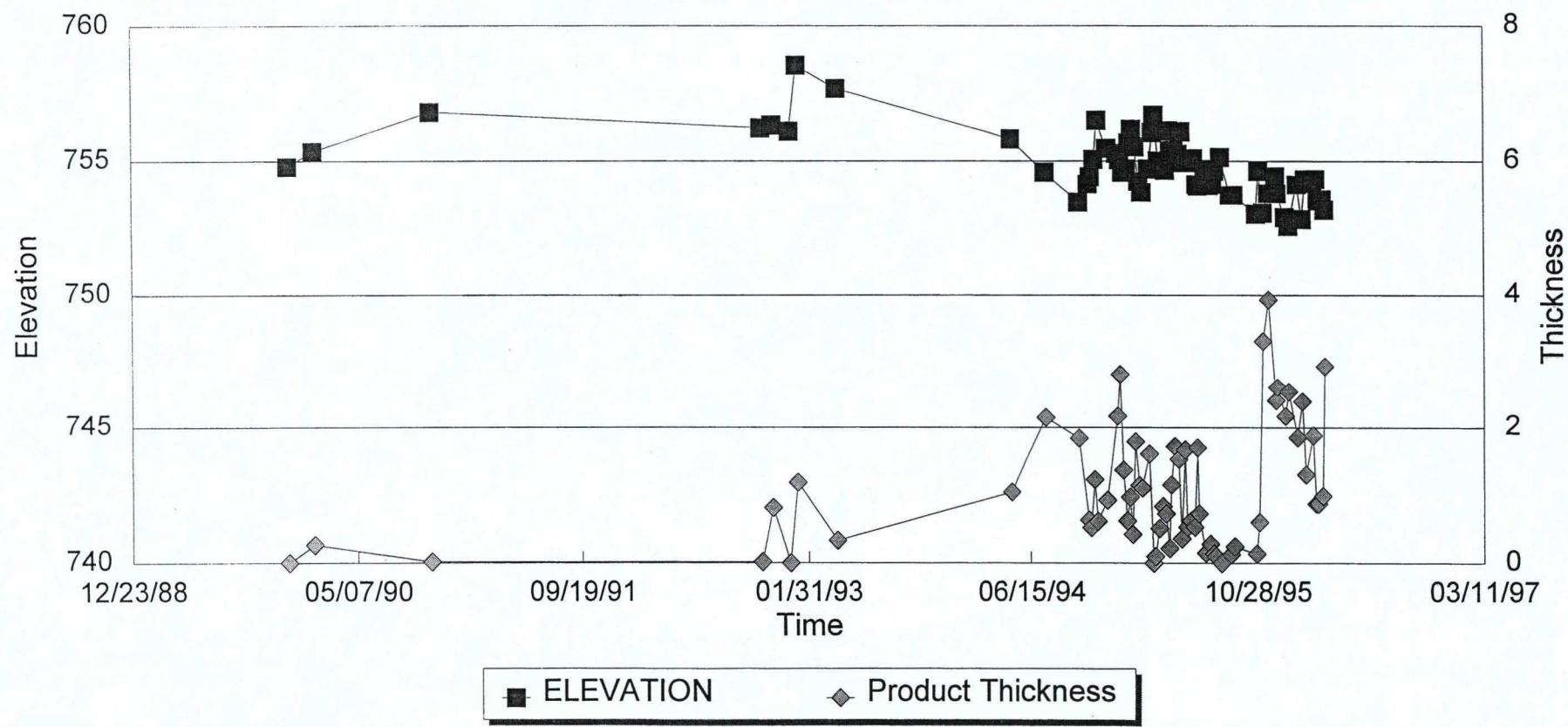
Botsford Yard



06/17/96

MW-20 Hydrograph

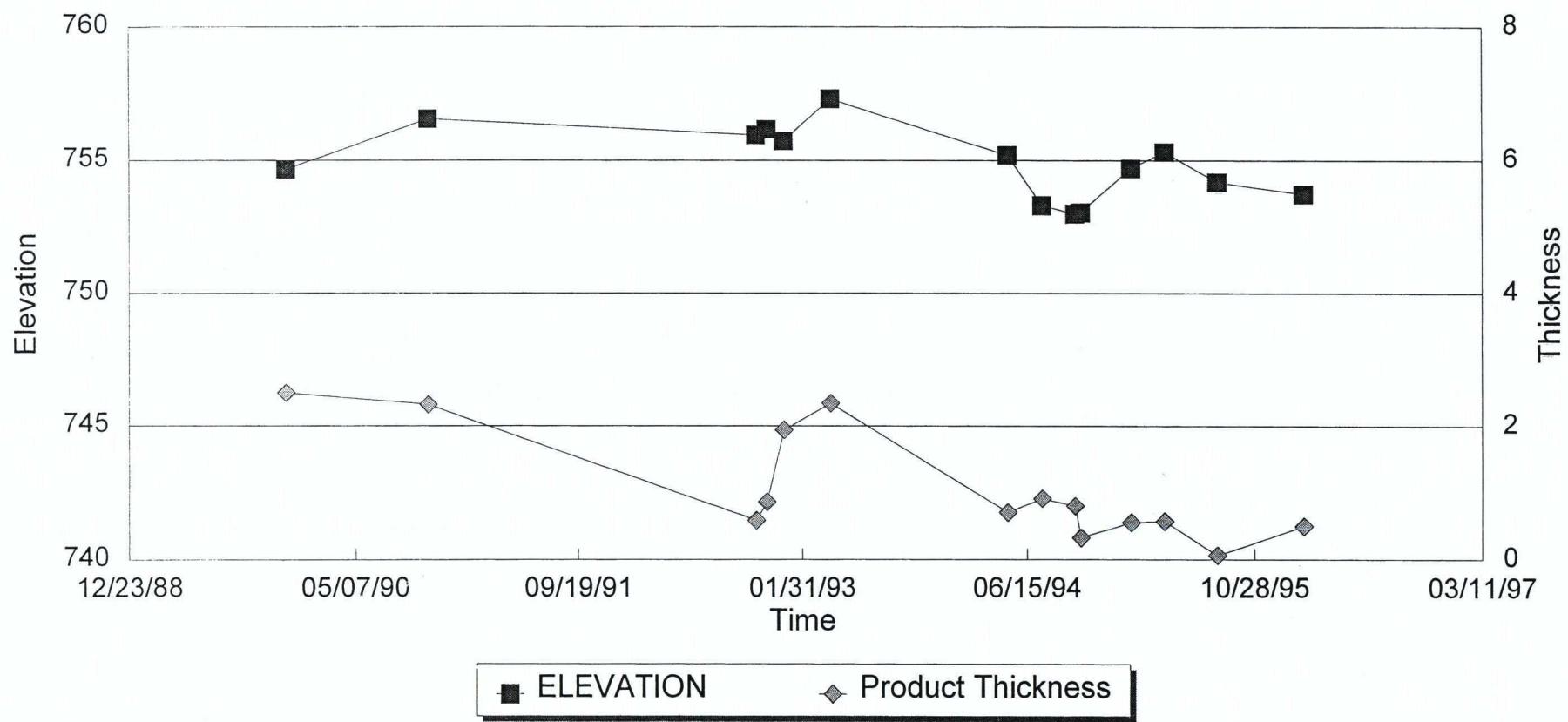
Botsford Yard



06/17/96

MW-18 Hydrograph

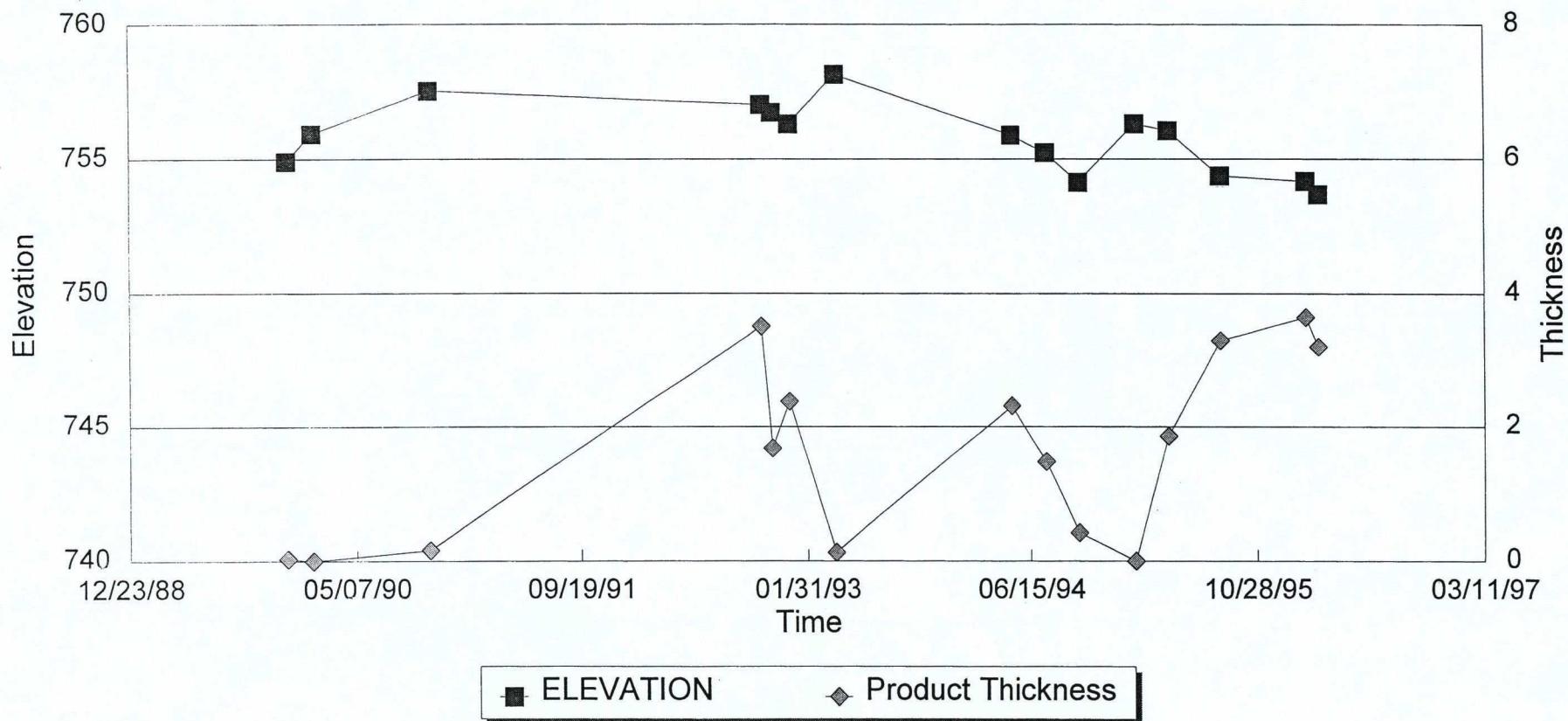
Botsford Yard



06/17/96

MW-16 Hydrograph

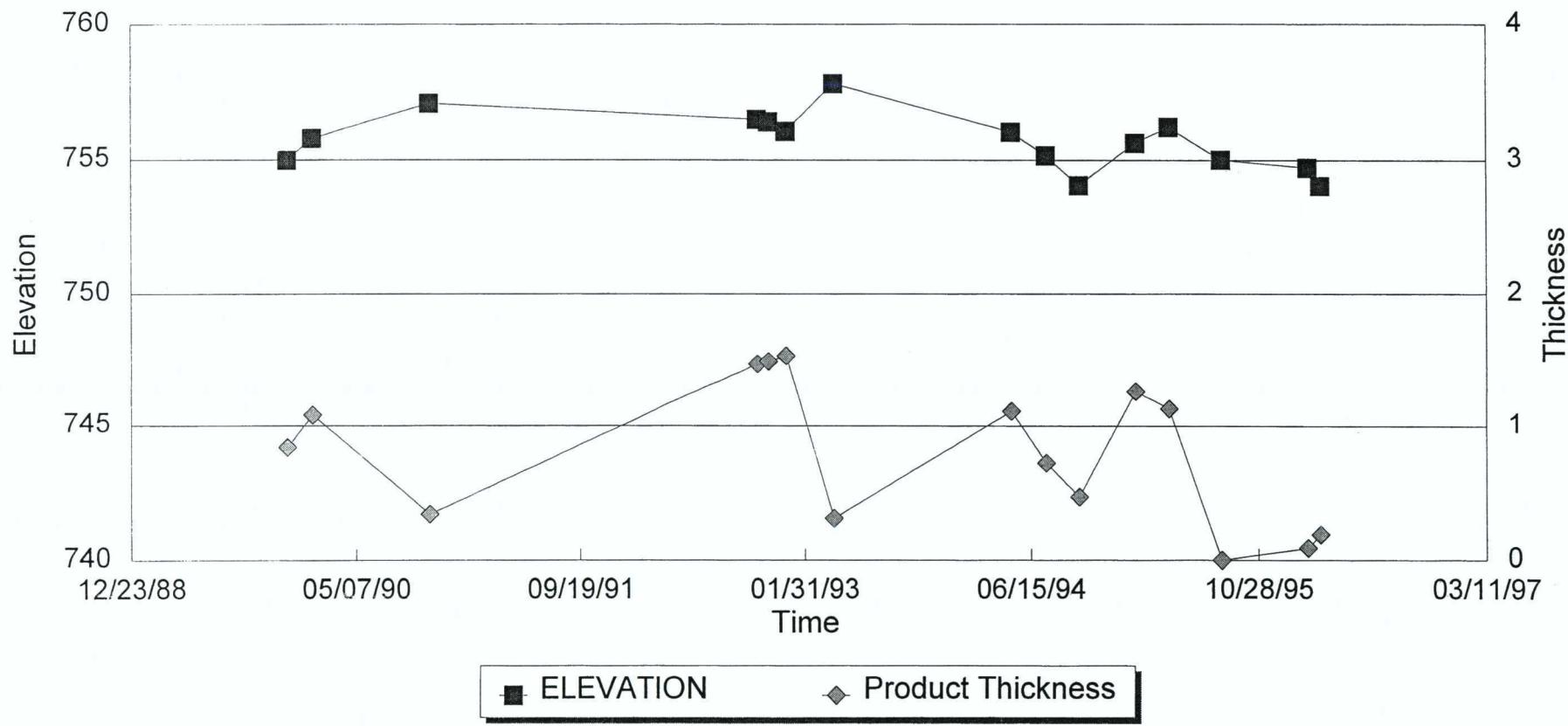
Botsford Yard



06/17/96

MW-12 Hydrograph

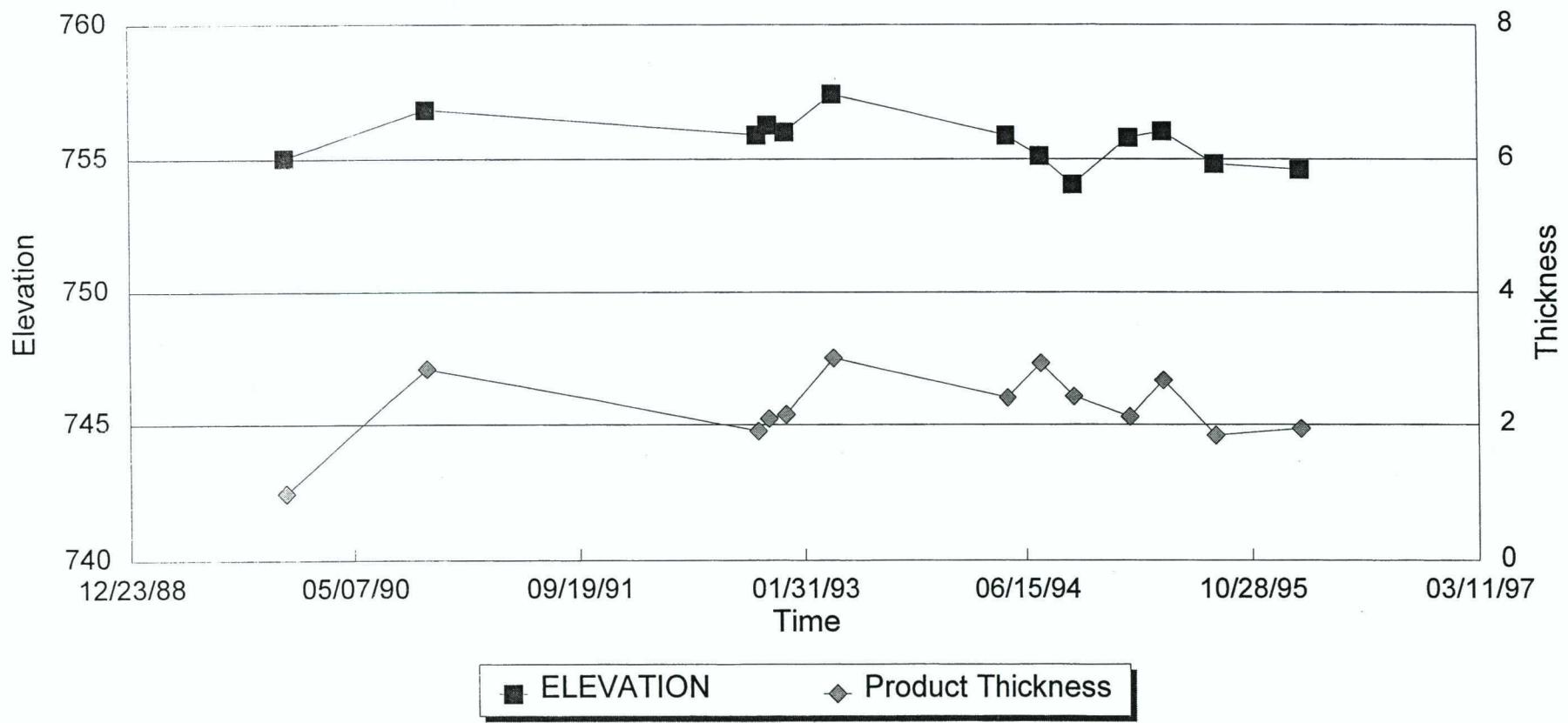
Botsford Yard



06/17/96

MW-11 Hydrograph

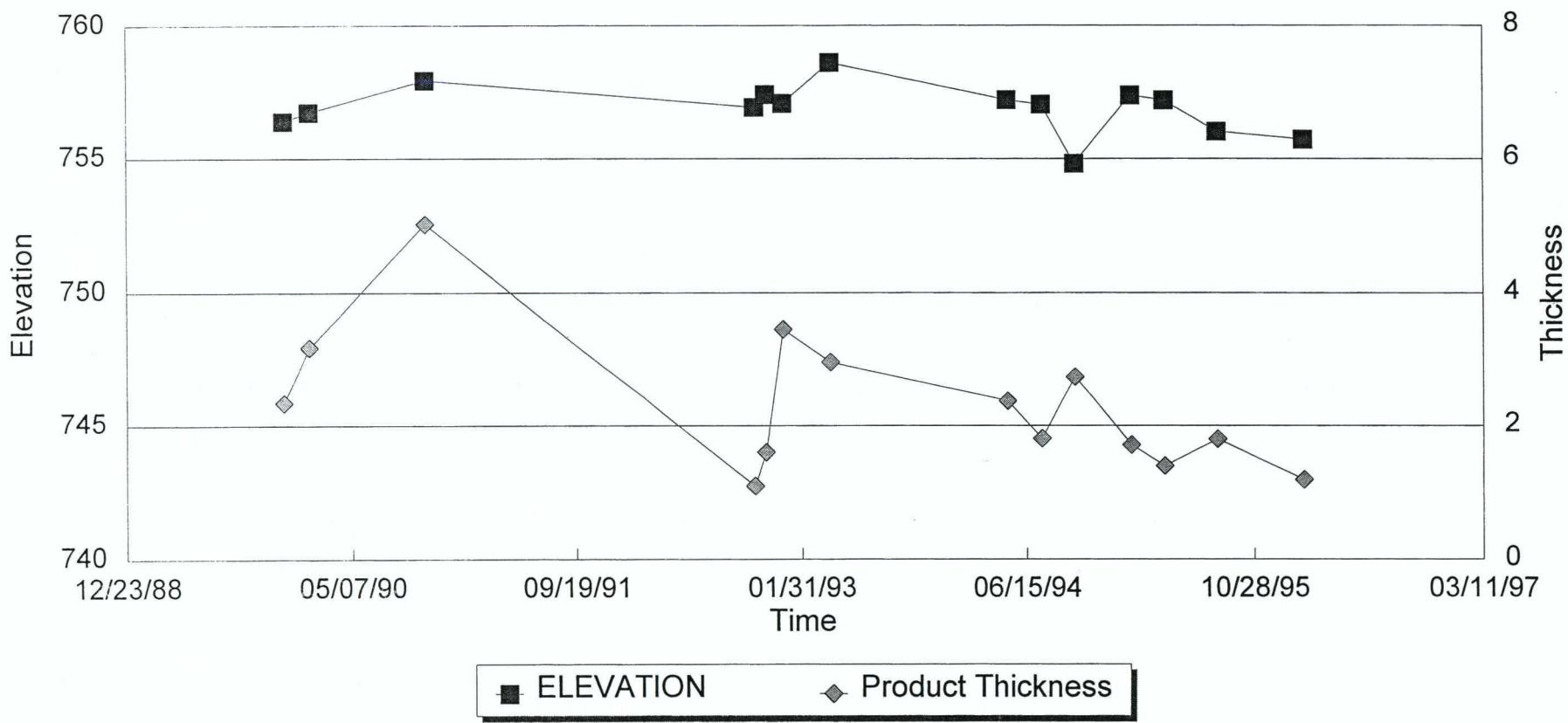
Botsford Yard



06/17/96

MW-10 Hydrograph

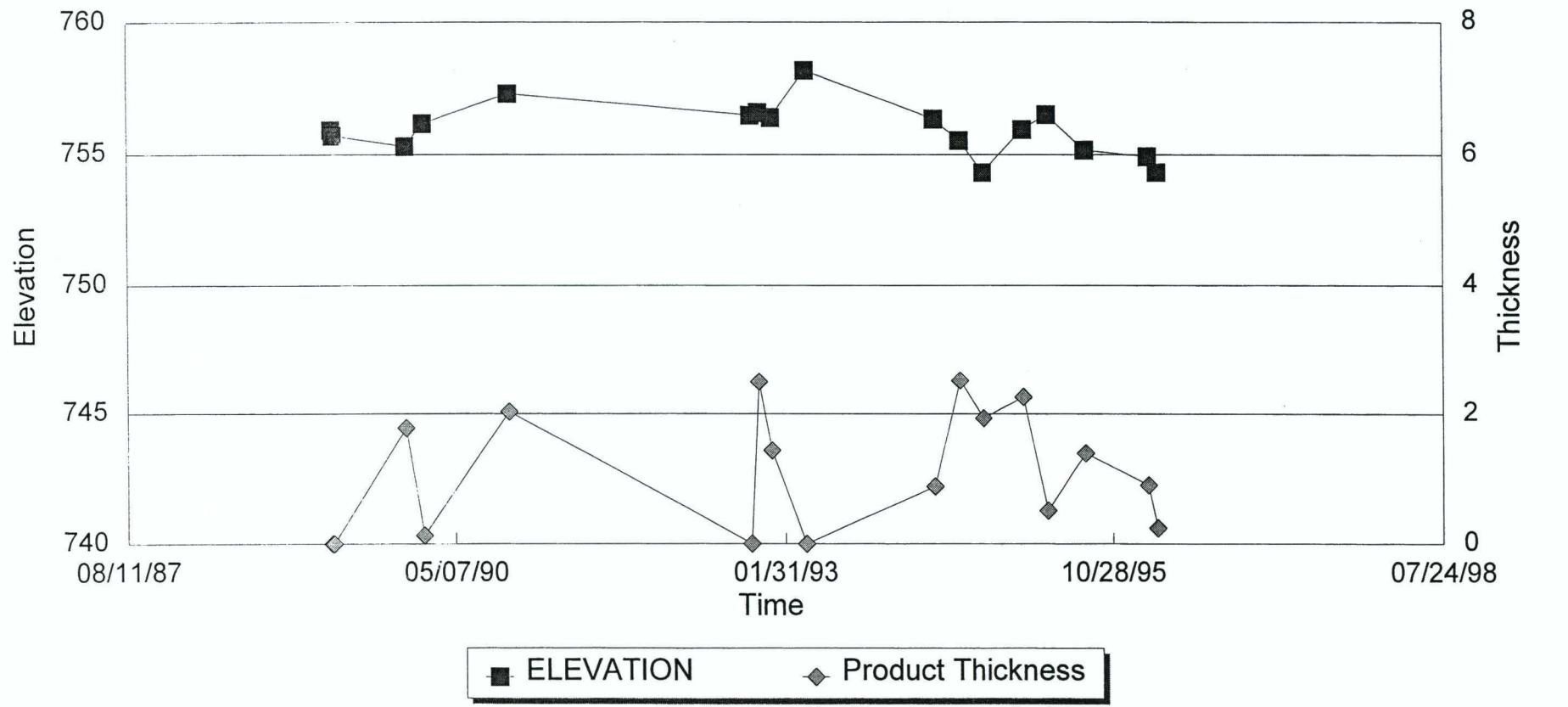
Botsford Yard



06/17/96

MW-09 Hydrograph

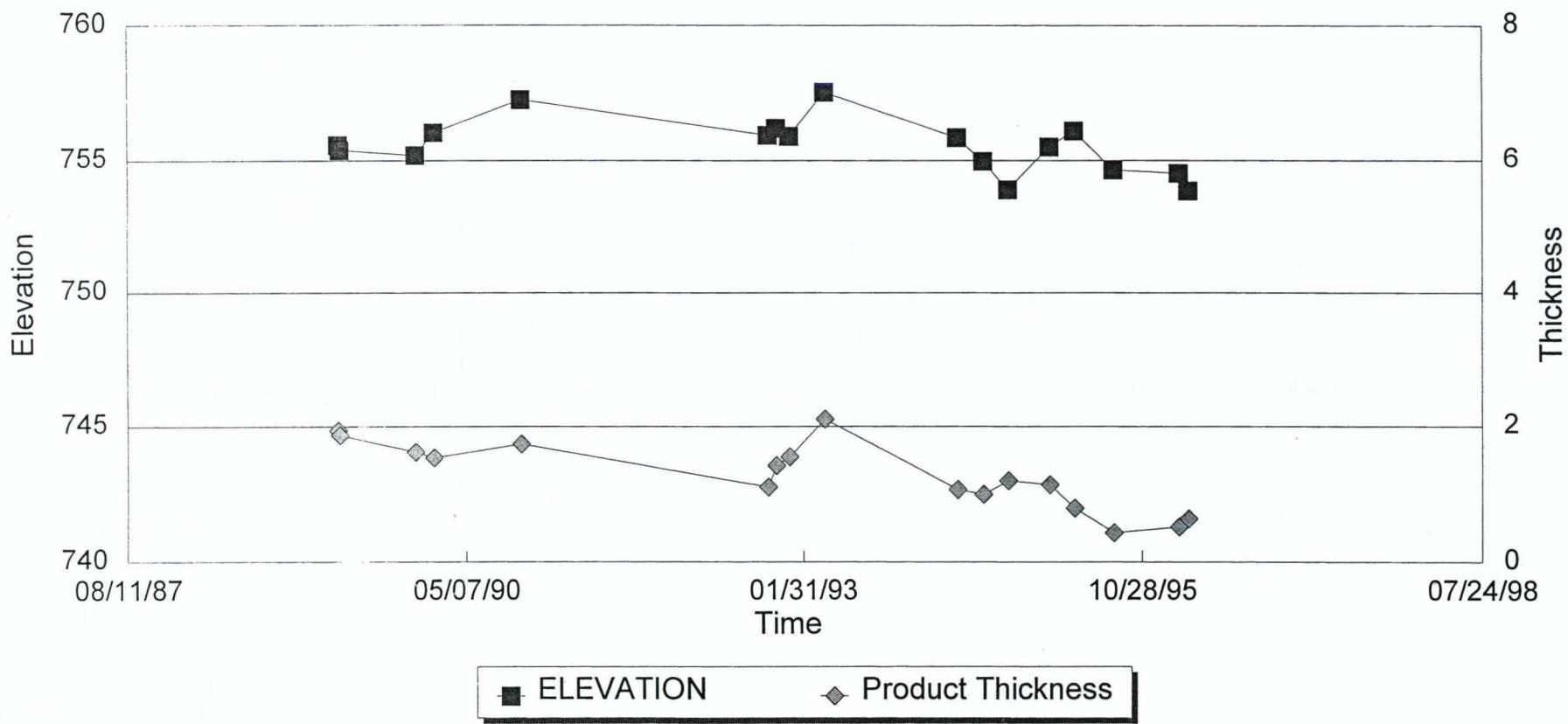
Botsford Yard



06/17/96

MW-07 Hydrograph

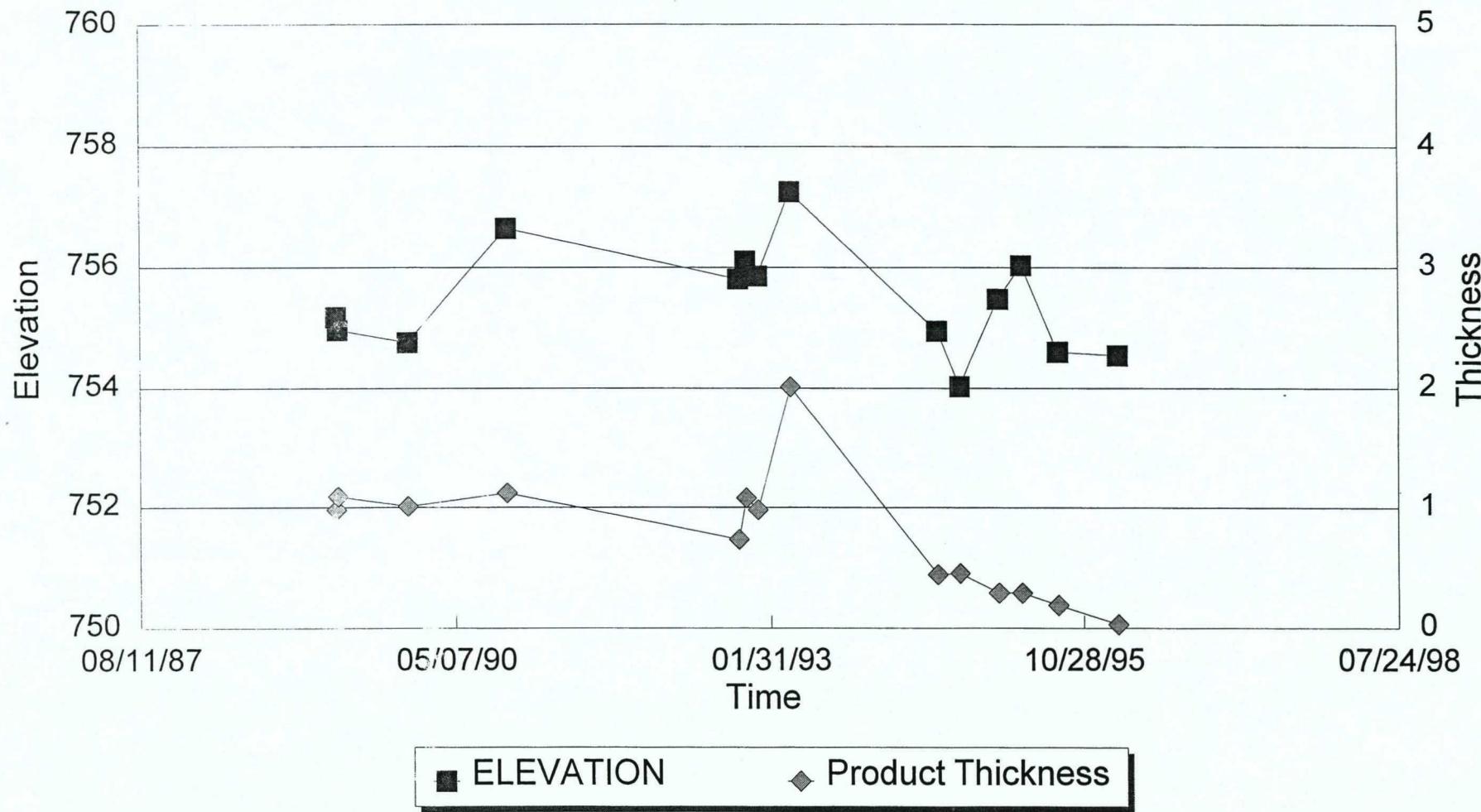
Botsford Yard



06/17/96

MW-03 Hydrograph

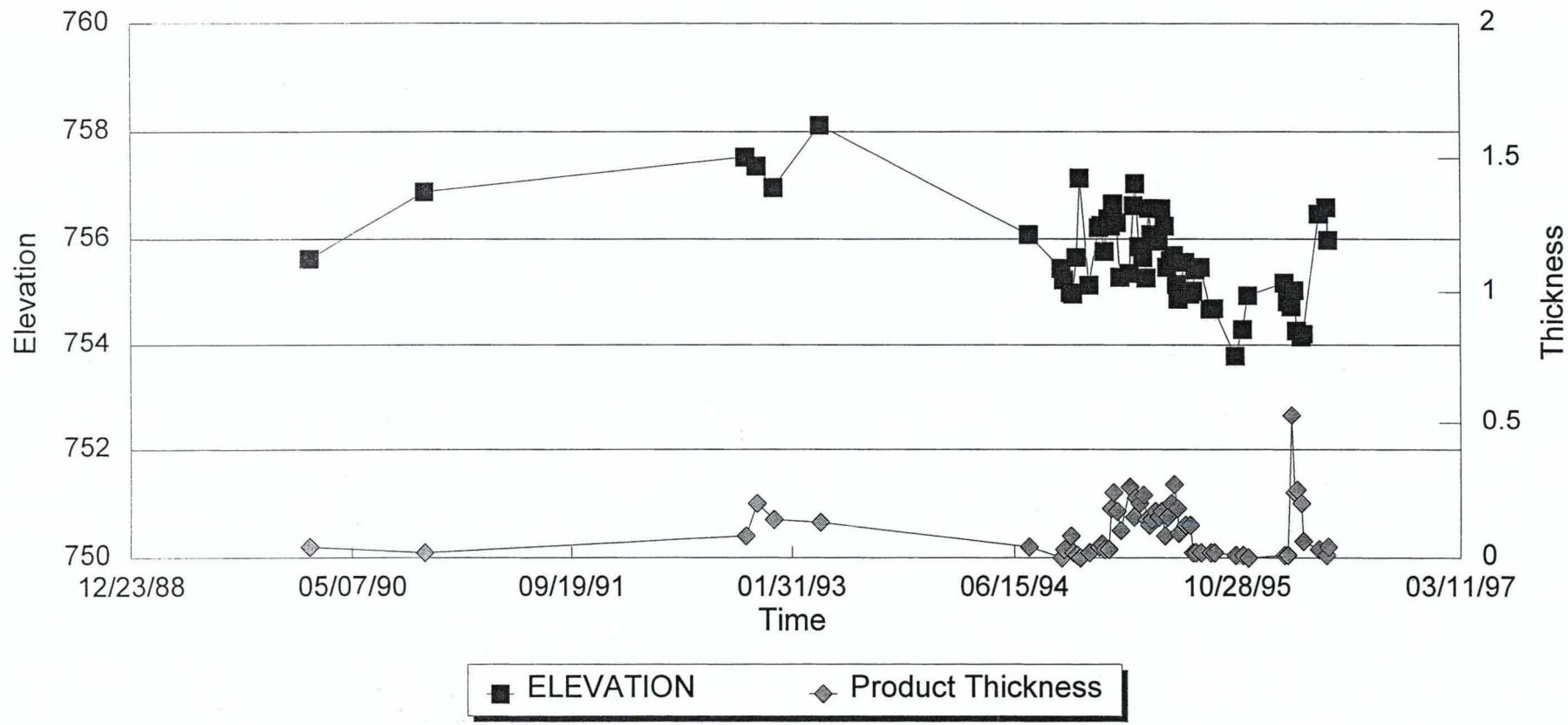
Botsford Yard



06/17/96

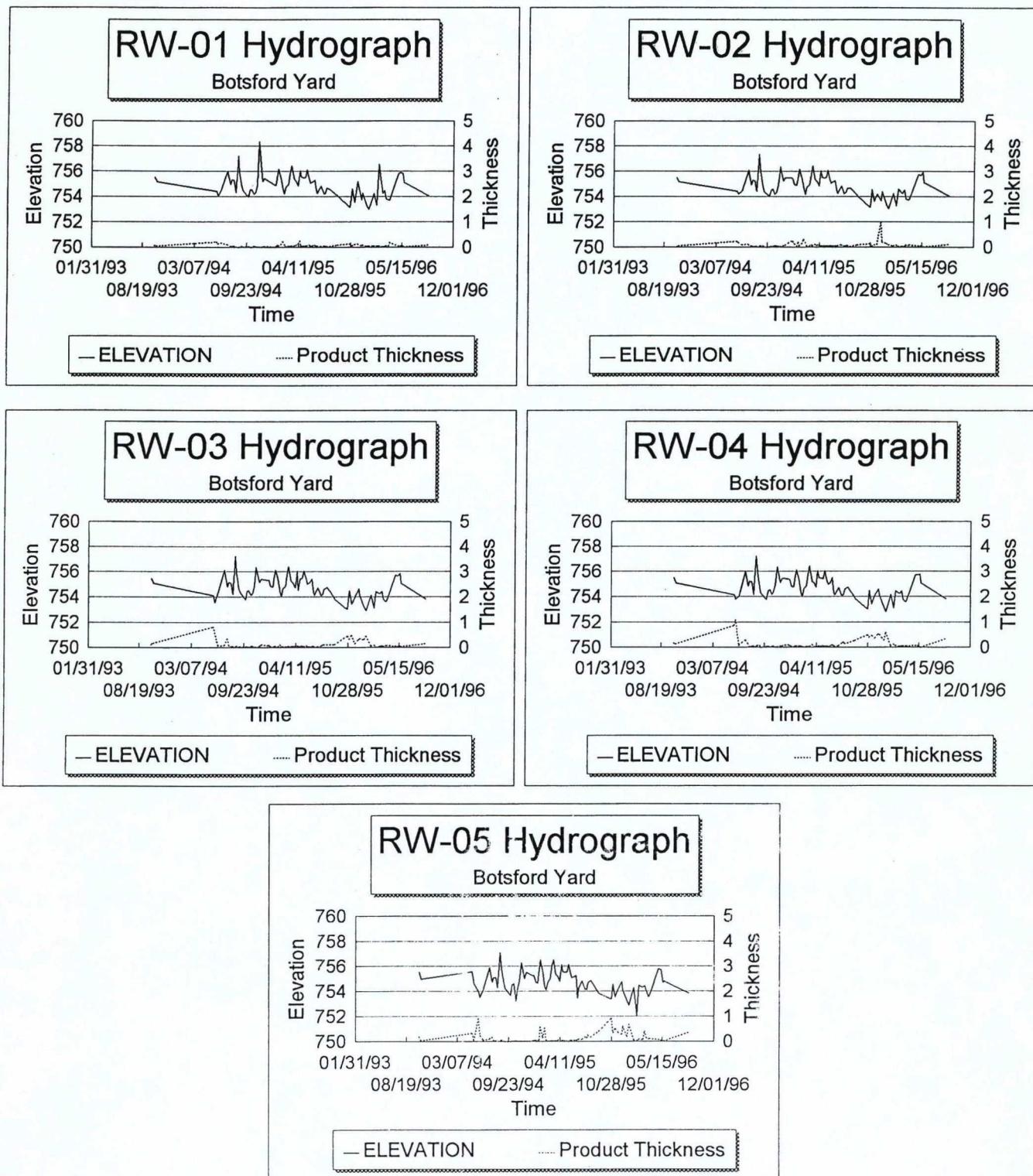
Sump S-04 Hydrograph

Botsford Yard



06/17/96

CONRAIL/BOTSFORD YARD
Recovery Wells





FLUOR DANIEL GTI

APPENDIX B

HYDROGRAPHS

Conrail
Botsford Yard
Kalamazoo, Michigan
Diesel Fuel Recovery Statistics

06/17/96

Date of Site Visit:

	04/30/96	05/09/96	05/17/96	05/21/96
Days between site visits	35	9	8	4
Cumulative days of operation	938	947	955	959
Cumulative weeks of operation	134	135	136	137

Diesel Fuel Recovery Data

Periodic Recovery: Mills St. Recovery Trench:

	0	0	240	10
Cumulative Recovery: Trench:	15295	15295	15535	15545

Periodic Recovery: Sump S-04:

	0	0	100	260
Cumulative Recovery: Sump S-04:	630	630	730	990

Periodic Recovery: Bailing MW-20:

	0	0	0	0
Cumulative Recovery: MW-20:	40.77	40.77	40.77	40.77

Periodic Recovery: Total Site:

	0	0	340	270
Cumulative Recovery: Total Site:	15965.77	15965.77	16305.77	16575.77

Notes

All amounts reported in gallons.

Recovery Trench Data

Fuel Oil Thickness (feet)

RW-1	0.04	0.05	0.04	0.02
RW-2	0.05	0.05	0.02	0.01
RW-3	0.05	0.04	0.05	0.03
RW-4	0.08	0.07	0.01	0
RW-5	0.07	0.05	0.06	0.01

Average DTP (ft):

	7.18	5.89	6.02	6.58
	13.8	15.2	15.1	14.8

Weighted Average Fuel Oil Thickness (ft):

	0.055	0.052	0.034	0.015
	370	381	253	109

Estimated Volume of Fuel Oil in Trench (gals):

Conrail

Botsford Yard

Kalamazoo, Michigan

Diesel Fuel Recovery Statistics

06/17/96

Date of Site Visit:

Days between site visits

Cumulative days of operation

Cumulative weeks of operation

Diesel Fuel Recovery Data

Periodic Recovery: Mills St. Recovery Trench:

01/17/96	01/19/96	01/25/96	02/05/96	02/13/96	02/20/96	02/29/96	03/06/96	03/12/96	03/22/96	03/26/96
1	2	6	11	8	7	9	6	6	10	4
834	836	842	853	861	868	877	883	889	899	903
119	119	120	122	123	124	125	126	127	128	129

Periodic Recovery: Mills St. Recovery Trench: 350 150 50 50 70 130 70 0 0 0 0
 Cumulative Recovery: Trench: 14775 14925 14975 15025 15095 15225 15295 15295 15295 15295 15295

Periodic Recovery: Sump S-04: 0 0 0 10 0 10 45 0 0 0 0
 Cumulative Recovery: Sump S-04: 565 565 565 575 575 585 630 630 630 630 630

Periodic Recovery: Bailing MW-20: 0 0 0 0.5 0 0 0.5 0.33 0.33 0 0
 Cumulative Recovery: MW-20: 39.11 39.11 39.11 39.61 39.61 39.61 40.11 40.44 40.77 40.77 40.77

Cumulative Recovery: Total Site: 15379.11 15529.11 15579.11 15639.61 15709.61 15849.61 15965.11 15965.44 15965.77 15965.77 15965.77

Recovery Trench Data

Fuel Oil Thickness (feet)

Fuel Oil Thickness (feet)

RW-2
RW-3

RW-3 0.65 0.65 0.65 0.57 0.65 0.64 0.67 0.64 0.67
RW-4 0.04 0.04 0.14 0.08 0.03 0.04 0.05 0.05 0.05

RW-4 0.34 0.34 0.14 0.33 0.33 0.34 0.33 0.33 0.33 0.33
 RW-5 0.05 0.05 0.12 0.08 0.01 0.07 0.1 0.17 0.09 0.11

RVV-3 0.85 0.85 0.12 0.89 0.01 0.87 0.4 0.17 0.89 0.11

Average RTD (ft): 7.43 7.43 8.44 6.74 7.10 7.39 7.17 7.77 8.00 7.03

Average DTP (ft): 7.45 7.45 8.44 8.74 7.10 7.39 7.11 7.77 8.00 7.93
 Average Liquid Width (ft): 17.0 13.3 13.3 11.4 14.6 13.9 13.4 13.8 12.7 12.2 12.4

Average Liquid Volume (ft³) 17.5 15.5 15.5 17.4 14.5 15.5 13.4 13.8 12.7 12.2 12.4
Weighted Average Fuel Oil Thickness (ft) 0.000 0.016 0.016 0.020 0.014 0.015 0.036 0.082 0.071 0.054 0.102

Estimated Volume of Fuel Oil in Trough (gals):

Estimated Volume of Fuel Oil in Trensch (gals). 0 297 297 301 313 307 234 349 438 319 614

Conrail
Botsford Yard
Kalamazoo, Michigan
Diesel Fuel Recovery Statistics

06/17/96	06/09/95	06/15/95	06/19/95	07/03/95	07/14/95	07/21/95	07/26/95	08/02/95	08/07/95	08/17/95	08/22/95
Date of Site Visit:											
Days between site visits	8	6	4	14	11	7	5	7	5	10	5
Cumulative days of operation	612	618	622	636	647	654	659	666	671	681	686
Cumulative weeks of operation	87	88	89	91	92	93	94	95	96	97	98

Diesel Fuel Recovery Data

Periodic Recovery: Mills St. Recovery Trench:	5	200	10	600	375	0	0	0	0	0	0
Cumulative Recovery: Trench:	12740	12940	12950	13550	13925	13925	13925	13925	13925	13925	13925
Periodic Recovery: Sump S-04:	0	0	0	0	0	80	45	65	30	45	5
Cumulative Recovery: Sump S-04:	130	130	130	130	130	210	255	320	350	395	400
Periodic Recovery: Bailing MW-20:	2	1.5	0	0	0.5	0.5	0.33	1.5	0	0.03	0
Cumulative Recovery: MW-20:	28	29.5	29.5	29.5	30	30.5	30.83	32.33	32.33	32.36	32.36
Periodic Recovery: Total Site:	7	201.5	10	600	375.5	80.5	45.33	66.5	30	45.03	5
Cumulative Recovery: Total Site:	12898	13099.5	13109.5	13709.5	14085	14165.5	14210.83	14277.33	14307.33	14352.36	14357.36

Notes

All amounts reported in gallons.

Recovery Trench Data

Fuel Oil Thickness (feet)	0.08	0.06	0.04	0.03	0.04	0.04	0.03	0.06	0.03	0.05	0.02
RW-1											
RW-2	0.05	0.05	0.04	0.08	0.04	0.06	0.07	0.06	0.03	0.04	0.08
RW-3	0.03	0.05	0.02	0.03	0.06	0.09	0.12	0.09	0.12	0.12	0.15
RW-4	0.11	0.07	0.04	0.14	0.14	0.21	0.15	0.25	0.18	0.33	0.17
RW-5	0.06	0.05	0.09	0.08	0.19	0.14	0.27	0.3	0.17	0.38	0.17
Average DTP (ft):	6.28	7.42	7.46	6.87	7.45	7.43	6.98	7.44	6.91	7.73	6.42
Average Liquid Width (ft):	15.1	13.3	13.2	14.3	13.3	13.3	14.1	13.3	14.3	12.7	15.0
Weighted Average Fuel Oil Thickness (ft):	0.066	0.056	0.041	0.067	0.080	0.098	0.108	0.129	0.093	0.152	0.106
Estimated Volume of Fuel Oil in Trench (gals):	484	365	267	470	516	636	740	834	646	945	777

Conrail
Botsford Yard
Kalamazoo, Michigan
Diesel Fuel Recovery Statistics

06/17/96

	03/23/95	03/31/95	04/07/95	04/14/95	04/19/95	04/27/95	05/05/95	05/11/95	05/19/95	05/24/95	06/01/95
Date of Site Visit:											
Days between site visits	9	8	7	7	5	8	8	6	8	5	8
Cumulative days of operation	534	542	549	556	561	569	577	583	591	596	604
Cumulative weeks of operation	76	77	78	79	80	81	82	83	84	85	86

Diesel Fuel Recovery Data

Periodic Recovery: Mills St. Recovery Trench:	35	15	85	20	45	25	65	45	100	15	60
Cumulative Recovery: Trench:	12260	12275	12360	12380	12425	12450	12515	12560	12660	12675	12735
Periodic Recovery: Sump S-04:	0	0	0	0	0	0	0	0	0	0	0
Cumulative Recovery: Sump S-04:	130	130	130	130	130	130	130	130	130	130	130
Periodic Recovery: Bailing MW-20:	0	0	5	0	0	0	2	0	2	0	0
Cumulative Recovery: MW-20:	17	17	22	22	22	22	24	24	26	26	26
Periodic Recovery: Total Site:	35	15	90	20	45	25	67	45	102	15	60
Cumulative Recovery: Total Site:	12407	12422	12512	12532	12577	12602	12669	12714	12816	12831	12891

Notes

All amounts reported in gallons.

Recovery Trench Data

Fuel Oil Thickness (feet)	0.06	0.07	0.1	0.24	0.06	0.05	0.06	0.05	0.08	0.05	0.06
RW-1	0.06	0.07	0.1	0.24	0.06	0.05	0.06	0.05	0.08	0.05	0.06
RW-2	0.11	0.07	0.09	0.04	0.06	0.04	0.06	0.05	0.06	0.04	0.04
RW-3	0.04	0.06	0.03	0.08	0.06	0.03	0.07	0.03	0.08	0.02	0.03
RW-4	0.12	0.02	0.04	0.02	0.06	0.04	0.07	0.03	0.05	0.04	0.03
RW-5	0.03	0.03	0.14	0.02	0.06	0.04	0.04	0.03	0.05	0.06	0.05
Average DTP (ft):	6.34	6.49	6.84	5.58	6.3	6.15	6.16	5.56	6.29	6.60	6.52
Average Liquid Width (ft):	15.0	15.0	14.4	15.3	15.1	15.1	15.1	15.3	15.1	14.8	15.0
Weighted Average Fuel Oil Thickness (ft):	0.075	0.054	0.076	0.095	0.060	0.040	0.062	0.040	0.067	0.041	0.042
Estimated Volume of Fuel Oil in Trench (gals):	547	395	533	708	440	298	454	296	488	293	309

Conrail
Botsford Yard
Kalamazoo, Michigan
Diesel Fuel Recovery Statistics

06/17/96

	12/28/94	01/04/95	01/12/95	01/18/95	01/23/95	02/08/95	02/14/95	02/21/95	03/01/95	03/10/95	03/14/95
Date of Site Visit:											
Days between site visits	6	7	8	6	5	16	6	7	8	9	4
Cumulative days of operation	449	456	464	470	475	491	497	504	512	521	525
Cumulative weeks of operation	64	65	66	67	68	70	71	72	73	74	75

Diesel Fuel Recovery Data

Periodic Recovery: Mills St. Recovery Trench:	105	90	220	0	160	595	90	205	320	25	60
Cumulative Recovery: Trench:	10460	10550	10770	10770	10930	11525	11615	11820	12140	12165	12225
Periodic Recovery: Sump S-04:						10					0
Cumulative Recovery: Sump S-04:	120	120	120	120	120	130	130	130	130	130	130
Periodic Recovery: Bailing MW-20:	5		3	4		3	2				0
Cumulative Recovery: MW-20:	5	5	8	12	12	12	15	17	17	17	17
Periodic Recovery: Total Site:	110	90	223	4	160	605	93	207	320	25	60
Cumulative Recovery: Total Site:	10585	10675	10898	10902	11062	11667	11760	11967	12287	12312	12372

Notes

All amounts reported in gallons.

Recovery Trench Data

Fuel Oil Thickness (feet)											
RW-1			0.02	0.08	0.05	0.22	0.12	0.03	0.04	0.03	0.06
RW-2	0.22	0.13	0.01	0.18	0.04	0.31	0.18	0.03	0.03	0.09	0.03
RW-3	0.09	0.03	0.01	0.03	0.05	0.11	0.04	0.03	0.03	0.02	0.05
RW-4	0.08	0.05	0.01	0.04	0.05	0.06	0.03	0.01	0.03	0.03	0.02
RW-5	0.03	0.05	0.01	0.05	0.19	0.54	0.06	0.01	0.02	0.03	0.02
Average DTP (ft):	6.17	6.62	6.87	6.00	5.56	7.40	7.61	6.97	6.78	5.64	5.2
Average Liquid Width (ft):	15.1	14.8	14.3	15.2	15.3	13.4	13.0	14.1	14.5	15.3	15.4
Weighted Average Fuel Oil Thickness (ft):	0.087	0.050	0.013	0.081	0.064	0.223	0.093	0.024	0.031	0.041	0.039
Estimated Volume of Fuel Oil in Trench (gals):	638	363	88	596	473	1448	585	165	222	307	294

Conrail
Botsford Yard
Kalamazoo, Michigan
Diesel Fuel Recovery Statistics

06/17/96	09/29/94	10/05/94	10/11/94	10/20/94	10/25/94	11/02/94	11/09/94	11/16/94	11/21/94	11/30/94	12/22/94
Date of Site Visit:											
Days between site visits	22	6	6	9	5	8	7	7	5	9	22
Cumulative days of operation	359	365	371	380	385	393	400	407	412	421	443
Cumulative weeks of operation	51	52	53	54	55	56	57	58	59	60	63

Diesel Fuel Recovery Data

Periodic Recovery: Mills St. Recovery Trench:	230	160	270	95	200	85	15	155	30	140	230
Cumulative Recovery: Trench:	8975	9135	9405	9500	9700	9785	9800	9955	9985	10125	10355
Periodic Recovery: Sump S-04:			40		35	10	5				30
Cumulative Recovery: Sump S-04:			40	40	75	85	90	90	90	90	120
Periodic Recovery: Bailing MW-20:											
Cumulative Recovery: MW-20:											
Periodic Recovery: Total Site:	230	160	310	95	235	95	20	155	30	140	260
Cumulative Recovery: Total Site:	8975	9135	9445	9540	9775	9870	9890	10045	10075	10215	10475

Notes

All amounts reported in gallons.

Recovery Trench Data

Fuel Oil Thickness (feet)	0.03	0.02	0	0.04	0.03	0.02	0.02		0.01	0.03	
RW-1											
RW-2	0	0.03	0.01	0.05	0.05	0.03	0.02		0.06	0.07	0.22
RW-3	0.04	0.03	0.02	0.06	0.05	0.01	0.02		0.04	0.11	0.08
RW-4	0.02	0.06	0.01	0.02	0.06	0.02	0.01		0.06	0.05	0.11
RW-5	0	0.01	0.01	0.03	0.02	0.01	0.02		0.01	0.02	0.02
Average DTP (ft):	7.83	7.17	7.10	7.70	7.44	6.77	4.93		6.55	6.23	6.12
Average Liquid Width (ft):	12.6	13.8	13.9	12.8	13.3	14.5	15.5		14.9	15.1	15.1
Weighted Average Fuel Oil Thickness (ft):	0.020	0.031	0.010	0.042	0.043	0.019	0.018		0.037	0.059	0.089
Estimated Volume of Fuel Oil in Trench (gals):	124	206	64	260	280	134	137		268	431	656

Conrail
Botsford Yard
Kalamazoo, Michigan
Diesel Fuel Recovery Statistics

06/17/96

Date of Site Visit:	06/30/94	07/09/94	07/15/94	07/19/94	07/25/94	08/02/94	08/10/94	08/19/94	08/24/94	09/01/94	09/07/94
Days between site visits	6	9	6	4	6	8	8	9	5	8	6
Cumulative days of operation	268	277	283	287	293	301	309	318	323	331	337
Cumulative weeks of operation	38	40	40	41	42	43	44	45	46	47	48

Diesel Fuel Recovery Data

Periodic Recovery: Mills St. Recovery Trench:	120	110	1200	150	465	280	0	20	15	165	100
Cumulative Recovery: Trench:	6240	6350	7550	7700	8165	8445	8445	8465	8480	8645	8745

Periodic Recovery: Sump S-04:

Cumulative Recovery: Sump S-04:

Periodic Recovery: Bailing MW-20:

Cumulative Recovery: MW-20:

Periodic Recovery: Total Site:	120	110	1200	150	465	280	0	20	15	165	100
Cumulative Recovery: Total Site:	6240	6350	7550	7700	8165	8445	8445	8465	8480	8645	8745

Notes

All amounts reported in gallons.

Recovery Trench Data

Fuel Oil Thickness (feet)

RW-1	0.1	0.03	0.06	0.03	0.06	0.02	0	0	0.05	0.01
RW-2	0.1	0.04	0.06	0.03	0.02	0.03	0.005	0.04	0.04	0.01
RW-3	0.07	0.1	0.35	0.1	0.04	0.05	0.01	0.05	0.03	0.03
RW-4	0.3	0.06	0.15	0.04	0.03	0.05	0.01	0.07	0.07	0
RW-5	0.1	0.07	0.16	0.04	0.03	0.01	0	0.07	0.01	0

Average DTP (ft):

5.61 6.41 6.78 6.41 6.45 7.38 4.43 5.77 7.01 7.32

Average Liquid Width (ft):

15.3 15.0 14.5 15.0 15.0 13.4 15.6 15.2 14.1 13.5

Weighted Average Fuel Oil Thickness (ft):

0.131 0.057 0.150 0.048 0.038 0.033 0.005 0.041 0.043 0.011

Estimated Volume of Fuel Oil in Trench (gals):

973 420 1060 351 276 216 39 301 292 74

Conrail
Botsford Yard
Kalamazoo, Michigan
Diesel Fuel Recovery Statistics

06/17/96

Date of Site Visit:	10/05/93	10/13/93	04/26/94	05/02/94	05/10/94	05/16/94	05/26/94	06/01/94	06/10/94	06/14/94	06/24/94
Days between site visits		8	195	6	8	6	10	6	9	4	10
Cumulative days of operation		8	203	209	217	223	233	239	248	252	262
Cumulative weeks of operation		1	29	30	31	32	33	34	35	36	37

Diesel Fuel Recovery Data

Periodic Recovery: Mills St. Recovery Trench:	0	1500	1500	0	1500	0	0	0	750	750	120
Cumulative Recovery: Trench:	0	1500	3000	3000	4500	4500	4500	4500	5250	6000	6120

Periodic Recovery: Sump S-04:

Cumulative Recovery: Sump S-04:

Periodic Recovery: Bailing MW-20:

Cumulative Recovery: MW-20:

Periodic Recovery: Total Site:	0	1500	1500	0	1500	0	0	0	750	750	120
Cumulative Recovery: Total Site:	0	1500	3000	3000	4500	4500	4500	4500	5250	6000	6120

Notes

All amounts reported in gallons.

Tank Full	Tank Full	F.S. Sunk	F.S. Susp.
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Recovery Trench Data

Fuel Oil Thickness (feet)

RW-1	0.07	0.05			0.2	0.13	0.17
RW-2	0	0.04			0.23	0.19	0.08
RW-3	0.12	0.18			0.83	0.59	0.08
RW-4	0.18	0.13			0.87	1.1	0.07
RW-5	0.18	0.04	0.32	0.03	0.91	0.23	0.06

Average DTP (ft):

6.13	6.52	7.30	7.75	7.35
------	------	------	------	------

Average Liquid Width (ft):

15.1	15.0	13.5	12.7	13.4
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Weighted Average Fuel Oil Thickness (ft):

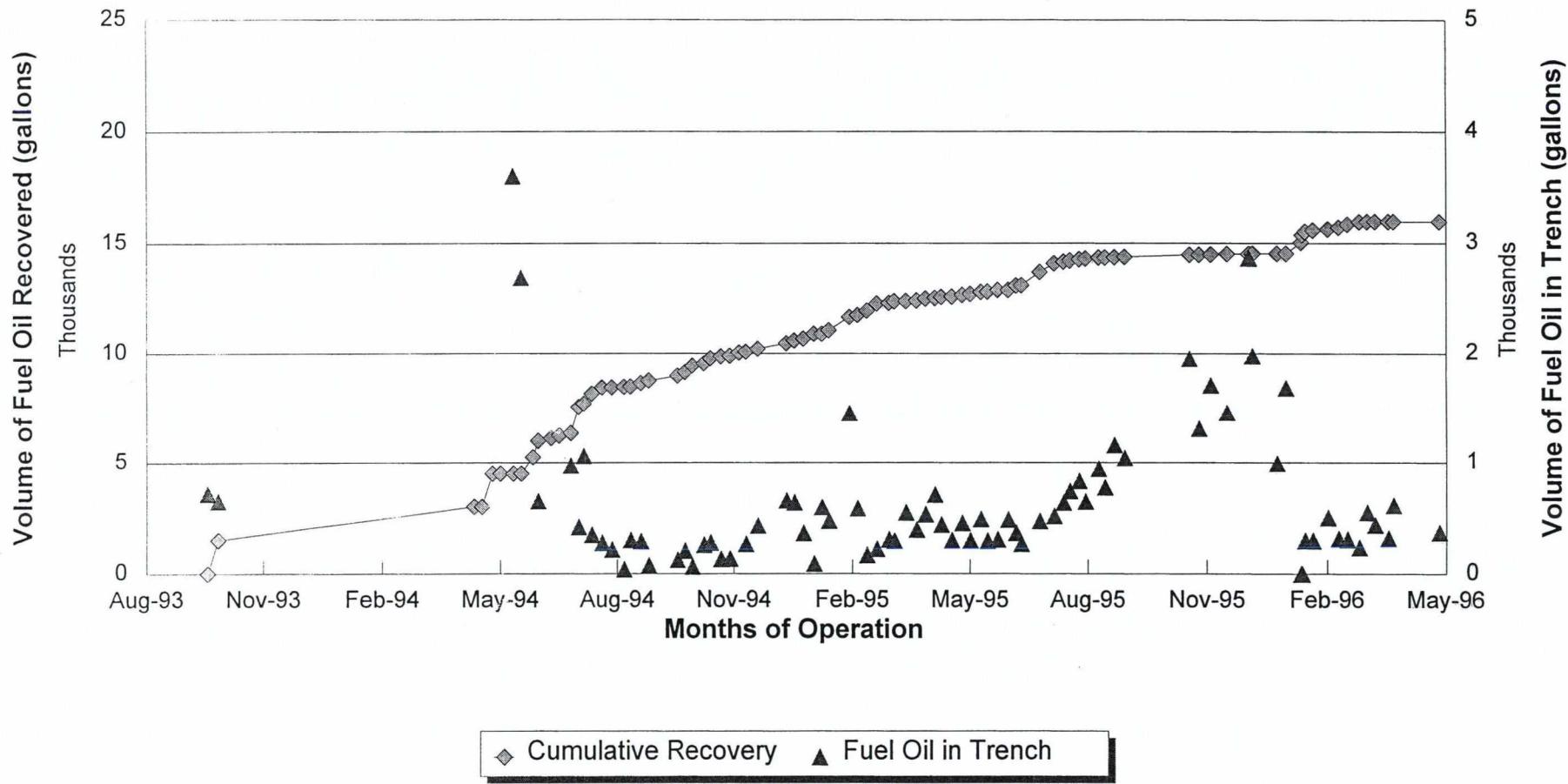
0.098	0.089	0.547	0.434	0.100
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Estimated Volume of Fuel Oil in Trench (gals):

721	652	3602	2688	652
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Mills Street Recovery Trench

Diesel Fuel Recovery



Conrail/Botsford Yard



FLUOR DANIEL GTI

APPENDIX A

DIESEL FUEL RECOVERY STATISTICS



FLUOR DANIEL GTI

APPENDIX C

GAUGING DATA TABLE

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
GP-02	01/05/96	ERR	11.95	---	NA	NA	NA	11.95	ERR
GP-02	01/25/96	ERR	7.27	---	NA	NA	NA	7.27	ERR
GP-02	02/05/96	ERR	8.69	---	NA	NA	NA	8.69	ERR
GP-02	02/13/96	ERR	7.41	---	NA	NA	NA	7.41	ERR
GP-02	02/29/96	ERR	7.56	---	NA	NA	NA	7.56	ERR
GP-02	03/06/96	ERR	7.03	---	NA	NA	NA	7.03	ERR
GP-02	03/12/96	ERR	8.16	---	NA	NA	NA	8.16	ERR
GP-02	03/22/96	ERR	8.19	---	NA	NA	NA	8.19	ERR
GP-02	03/26/96	ERR	8.08	---	NA	NA	NA	8.08	ERR
GP-03	01/05/96	ERR	11.90	10.80	1.10	0.80	0.88	11.02	ERR
GP-03	01/25/96	ERR	10.00	9.62	0.38	0.80	0.30	9.70	ERR
GP-03	02/05/96	ERR	11.63	10.54	1.09	0.80	0.87	10.76	ERR
GP-03	02/13/96	ERR	10.01	9.46	0.55	0.80	0.44	9.57	ERR
GP-03	02/20/96	ERR	10.61	9.55	1.06	0.80	0.85	9.76	ERR
GP-03	02/29/96	ERR	10.11	9.69	0.42	0.80	0.34	9.77	ERR
GP-03	03/06/96	ERR	9.82	9.35	0.47	0.80	0.38	9.44	ERR
GP-03	03/12/96	ERR	10.55	10.10	0.45	0.80	0.36	10.19	ERR
GP-03	03/22/96	ERR	10.61	10.10	0.51	0.80	0.41	10.20	ERR
GP-03	03/26/96	ERR	10.65	10.11	0.54	0.80	0.43	10.22	ERR
GP-06	01/05/96	ERR	11.62	---	NA	NA	NA	11.62	ERR
GP-06	01/25/96	ERR	10.30	---	NA	NA	NA	10.30	ERR
GP-06	02/05/96	ERR	11.39	---	NA	NA	NA	11.39	ERR
GP-06	02/13/96	ERR	10.05	---	NA	NA	NA	10.05	ERR
GP-06	02/20/96	ERR	10.42	10.41	0.01	0.80	0.01	10.41	ERR
GP-06	02/29/96	ERR	10.29	---	NA	NA	NA	10.29	ERR
GP-06	03/06/96	ERR	10.04	---	NA	NA	NA	10.04	ERR
GP-06	03/12/96	ERR	10.71	---	NA	NA	NA	10.71	ERR
GP-06	03/22/96	ERR	10.85	---	NA	NA	NA	10.85	ERR
GP-06	03/26/96	ERR	10.81	---	NA	NA	NA	10.81	ERR
GP-14	01/05/96	ERR	10.38	---	NA	NA	NA	10.38	ERR
GP-14	01/25/96	ERR	9.22	---	NA	NA	NA	9.22	ERR
GP-14	02/05/96	ERR	10.32	---	NA	NA	NA	10.32	ERR
GP-14	02/13/96	ERR	9.01	---	NA	NA	NA	9.01	ERR
GP-14	02/20/96	ERR	9.35	---	NA	NA	NA	9.35	ERR

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M / D / Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
GP-14	02/29/96	ERR	9.18	---		NA	NA	9.18	ERR
GP-14	03/06/96	ERR	8.98	---		NA	NA	8.98	ERR
GP-14	03/12/96	ERR	9.63	---		NA	NA	9.63	ERR
GP-14	03/22/96	ERR	9.83	---		NA	NA	9.83	ERR
GP-14	03/26/96	ERR	9.73	---		NA	NA	9.73	ERR
GP-16	01/05/96	ERR	12.17	---		NA	NA	12.17	ERR
GP-16	01/25/96	ERR	10.86	---		NA	NA	10.86	ERR
GP-16	02/05/96	ERR	11.92	---		NA	NA	11.92	ERR
GP-16	02/13/96	ERR	10.58	---		NA	NA	10.58	ERR
GP-16	02/20/96	ERR	10.94	---		NA	NA	10.94	ERR
GP-16	02/29/96	ERR	10.88	---		NA	NA	10.88	ERR
GP-16	03/06/96	ERR	10.63	---		NA	NA	10.63	ERR
GP-16	03/12/96	ERR	11.23	---		NA	NA	11.23	ERR
GP-16	03/22/96	ERR	11.41	---		NA	NA	11.41	ERR
GP-16	03/26/96	ERR	11.34	---		NA	NA	11.34	ERR
GP-18	01/05/96	ERR	11.38	---		NA	NA	11.38	ERR
GP-18	01/25/96	ERR	10.12	---		NA	NA	10.12	ERR
GP-18	02/05/96	ERR	11.10	---		NA	NA	11.10	ERR
GP-18	02/13/96	ERR	9.84	---		NA	NA	9.84	ERR
GP-18	02/20/96	ERR	10.18 SHEEN	---		NA	NA	10.18	ERR
GP-18	02/29/96	ERR	10.16	---		NA	NA	10.16	ERR
GP-18	03/06/96	ERR	9.81	---		NA	NA	9.81	ERR
GP-18	03/12/96	ERR	11.57	---		NA	NA	11.57	ERR
GP-18	03/22/96	ERR	10.63	---		NA	NA	10.63	ERR
GP-18	03/26/96	ERR	10.64	---		NA	NA	10.64	ERR
GP-20	01/05/96	ERR	13.75	---		NA	NA	13.75	ERR
GP-20	01/25/96	ERR	12.45	---		NA	NA	12.45	ERR
GP-20	02/05/96	ERR	13.50	---		NA	NA	13.50	ERR
GP-20	02/13/96	ERR	12.16	---		NA	NA	12.16	ERR
GP-20	02/20/96	ERR	12.51	---		NA	NA	12.51	ERR
GP-20	02/29/96	ERR	12.48	---		NA	NA	12.48	ERR
GP-20	03/06/96	ERR	12.16	---		NA	NA	12.16	ERR
GP-20	03/12/96	ERR	12.78	---		NA	NA	12.78	ERR
GP-20	03/22/96	ERR	12.98	---		NA	NA	12.98	ERR

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
GP-20	03/26/96	ERR	12.92	---		NA	NA	12.92	ERR
GP-21	01/05/96	ERR	14.40	---		NA	NA	14.40	ERR
GP-21	01/25/96	ERR	12.99	---		NA	NA	12.99	ERR
GP-21	02/05/96	ERR	14.12	---		NA	NA	14.12	ERR
GP-21	02/13/96	ERR	12.84	---		NA	NA	12.84	ERR
GP-21	02/20/96	ERR	13.20	---		NA	NA	13.20	ERR
GP-21	02/29/96	ERR	13.38	---		NA	NA	13.38	ERR
GP-21	03/06/96	ERR	12.78	---		NA	NA	12.78	ERR
GP-21	03/12/96	ERR	13.48	---		NA	NA	13.48	ERR
GP-21	03/22/96	ERR	13.62	---		NA	NA	13.62	ERR
GP-21	03/26/96	ERR	13.64	---		NA	NA	13.64	ERR
GP-22	01/05/96	ERR	10.55	---		NA	NA	10.55	ERR
GP-22	01/25/96	ERR	9.25	---		NA	NA	9.25	ERR
GP-22	02/05/96	ERR	10.31	---		NA	NA	10.31	ERR
GP-22	02/13/96	ERR	8.97	---		NA	NA	8.97	ERR
GP-22	02/20/96	ERR	9.34	---		NA	NA	9.34	ERR
GP-22	02/29/96	ERR	9.19	---		NA	NA	9.19	ERR
GP-22	03/06/96	ERR	9.01	---		NA	NA	9.01	ERR
GP-22	03/12/96	ERR	9.63	---		NA	NA	9.63	ERR
GP-22	03/22/96	ERR	9.85	---		NA	NA	9.85	ERR
GP-22	03/26/96	ERR	9.75	---		NA	NA	9.75	ERR
MW-01	04/21/89	767.93	11.96	---		NA	NA	11.96	755.97
MW-01	04/26/89	767.93	12.19	---		NA	NA	12.19	755.74
MW-01	12/05/89	767.93	12.61	-		NA	NA	12.61	755.32
MW-01	01/31/90	767.93	12.15	---		NA	NA	12.15	755.78
MW-01	10/17/90	767.93	10.83	---		NA	NA	10.83	757.10
MW-01	10/20/92	767.93	11.73	---		NA	NA	11.73	756.20
MW-01	11/13/92	767.93	3.11	---		NA	NA	3.11	764.82
MW-01	12/21/92	767.93	3.04	---		NA	NA	3.04	764.89
MW-01	04/05/93	767.93	2.51	Casing cracked about 2.5 feet from the top					
MW-01	07/18/94	767.93	1.61	---		NA	NA	1.61	766.32
MW-01	09/29/94	767.93	1.33	---		NA	NA	1.33	766.60
MW-01	01/31/95	767.93		NA		NA	NA	NA	NA
MW-01	04/14/95	767.93	1.63	---		NA	NA	1.63	766.30

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

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Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
MW-01	08/07/95	767.93	1.59	---		NA	NA	1.59	766.34
MW-02	12/21/92	100.10	Well gauged in November; damaged (cause unknown) prior to survey in December 1992.						
MW-02	01/31/95				NA	NA	NA	NA	NA
MW-03	04/21/89	767.27	12.88	11.90	0.98	0.80	0.78	12.10	755.17
MW-03	04/26/89	767.27	13.18	12.09	1.09	0.80	0.87	12.31	754.96
MW-03	12/05/89	767.27	13.32	12.31	1.01	0.80	0.81	12.51	754.76
MW-03	10/17/90	767.27	11.52	10.40	1.12	0.80	0.90	10.62	756.65
MW-03	10/20/92	767.27	12.05	11.32	0.73	0.80	0.58	11.47	755.80
MW-03	11/13/92	767.27	12.03	10.95	1.08	0.80	0.86	11.17	756.10
MW-03	12/21/92	767.27	12.20	11.22	0.98	0.80	0.78	11.42	755.85
MW-03	04/05/93	767.27	11.63	9.62	2.01	0.80	1.61	10.02	757.25
MW-03	07/18/94	767.27	12.68	12.24	0.44	0.80	0.35	12.33	754.94
MW-03	09/29/94	767.27	13.60	13.15	0.45	0.80	0.36	13.24	754.03
MW-03	01/31/95	767.27	12.03	11.74	0.29	0.80	0.23	11.80	755.47
MW-03	04/14/95	767.27	11.47	11.18	0.29	0.80	0.23	11.24	756.03
MW-03	08/07/95	767.27	12.82	12.63	0.19	0.80	0.15	12.67	754.60
MW-03	02/13/96	767.27	12.75	12.72	0.03	0.80	0.02	12.73	754.54
MW-04	04/21/89	764.16	9.41	9.35	0.06	0.80	0.05	9.36	754.80
MW-04	04/26/89	764.16	9.73	9.56	0.17	0.80	0.14	9.59	754.57
MW-04	12/05/89	764.16	9.52	---		NA	NA	9.52	754.64
MW-04	01/31/90	764.16	8.90	---		NA	NA	8.90	755.26
MW-04	10/17/90	764.16	7.29	---		NA	NA	7.29	756.87
MW-04	10/20/92	764.16	8.17 SHEEN	---		NA	NA	8.17	755.99
MW-04	11/13/92	764.16	7.81	---		NA	NA	7.81	756.35
MW-04	12/21/92	764.16	8.24	---		NA	NA	8.24	755.92
MW-04	01/07/93	764.16	5.45	---		NA	NA	5.45	758.71
MW-04	04/05/93	764.16	6.46	---		NA	NA	6.46	757.70
MW-04	05/02/94	764.16	8.37	---		NA	NA	8.37	755.79
MW-04	07/18/94	764.16	9.20	---		NA	NA	9.20	754.96
MW-04	09/29/94	764.16	10.56	---		NA	NA	10.56	753.60
MW-04	01/31/95	764.16	8.50	8.49	0.01	0.80	0.01	8.49	755.67
MW-04	04/14/95	764.16	8.04	8.01	0.03	0.80	0.02	8.02	756.14
MW-04	08/07/95	764.16	9.02	---		NA	NA	9.02	755.14
MW-04	02/13/96	764.16	9.76	---		NA	NA	9.76	754.40

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

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Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
MW-05	04/21/89	764.04	8.94		---	NA	NA	8.94	755.10
MW-05	04/26/89	764.04	9.08		---	NA	NA	9.08	754.96
MW-05	12/05/89	764.04	9.01		---	NA	NA	9.01	755.03
MW-05	01/31/90	764.04	8.41		---	NA	NA	8.41	755.63
MW-05	10/17/90	764.04	7.16		---	NA	NA	7.16	756.88
MW-05	10/20/92	764.04	8.02		---	NA	NA	8.02	756.02
MW-05	11/13/92	764.04	7.66		---	NA	NA	7.66	756.38
MW-05	12/21/92	764.04	8.07		---	NA	NA	8.07	755.97
MW-05	01/07/93	764.04	5.30		---	NA	NA	5.30	758.74
MW-05	04/05/93	764.04	6.35	SHEEN	---	NA	NA	6.35	757.69
MW-05	05/02/94	764.06	8.15		---	NA	NA	8.15	755.91
MW-05	07/18/94	764.06	9.55		---	NA	NA	9.55	754.51
MW-05	09/29/94	764.06	10.53		---	NA	NA	10.53	753.53
MW-05	10/11/94	764.06	9.54	9.53	0.01	0.80	0.01	9.53	754.53
MW-05	01/31/95	764.06	8.40		---	NA	NA	8.40	755.66
MW-05	04/14/95	764.06	7.91		---	NA	NA	7.91	756.15
MW-05	08/07/95	764.06	9.35		---	NA	NA	9.35	754.71
MW-05	02/13/96	764.06	9.69		---	NA	NA	9.69	754.37
MW-05	03/12/96	764.06	10.12		---	NA	NA	10.12	753.94
MW-06	04/21/89	764.59	9.14	9.12	0.02	0.80	0.02	9.12	755.47
MW-06	04/26/89	764.59	9.35	9.33	0.02	0.80	0.02	9.33	755.26
MW-06	12/05/89	764.59	9.55	9.54	0.01	0.80	0.01	9.54	755.05
MW-06	01/31/90	764.59	8.95		---	NA	NA	8.95	755.64
MW-06	10/17/90	764.59	7.65	7.63	0.02	0.80	0.02	7.63	756.96
MW-06	10/20/92	764.59	8.46		---	NA	NA	8.46	756.13
MW-06	11/13/92	764.59	8.04	SHEEN	---	NA	NA	8.04	756.55
MW-06	12/21/92	764.59	8.56		---	NA	NA	8.56	756.03
MW-06	01/07/93	764.59	5.93	5.82	0.11	0.80	0.09	5.84	758.75
MW-06	04/05/93	764.59	6.91	6.82	0.09	0.80	0.07	6.84	757.75
MW-06	05/02/94	764.59	8.62		---	NA	NA	8.62	755.97
MW-06	07/18/94	764.59	9.46	9.45	0.01	0.80	0.01	9.45	755.14
MW-06	09/29/94	764.59	10.65	10.63	0.02	0.80	0.02	10.63	753.96
MW-06	01/31/95	764.59	9.07	8.89	0.18	0.80	0.14	8.93	755.66
MW-06	04/14/95	764.59	8.40		---	NA	NA	8.40	756.19
MW-06	08/07/95	764.59	9.68		---	NA	NA	9.68	754.91
MW-06	02/13/96	764.59	10.00		---	NA	NA	10.00	754.59

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

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Well ID	DATE GAUGED M / D / Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
MW-06	02/20/96	764.59	10.35	---		NA	NA	10.35	754.24
MW-06	03/12/96	764.59	10.70	---		NA	NA	10.70	753.89
MW-07	04/21/89	769.13	15.09	13.15	1.94	0.80	1.55	13.54	755.59
MW-07	04/26/89	769.13	15.23	13.36	1.87	0.80	1.50	13.73	755.40
MW-07	12/05/89	769.13	15.23	13.61	1.62	0.80	1.30	13.93	755.20
MW-07	01/30/90	769.13	14.32	12.78	1.54	0.80	1.23	13.09	756.04
MW-07	10/17/90	769.13	13.24	11.50	1.74	0.80	1.39	11.85	757.28
MW-07	10/20/92	769.13	14.06	12.95	1.11	0.80	0.89	13.17	755.96
MW-07	11/13/92	769.13	14.05	12.63	1.42	0.80	1.14	12.91	756.22
MW-07	12/21/92	769.13	14.46	12.91	1.55	0.80	1.24	13.22	755.91
MW-07	04/05/93	769.13	13.26	11.15	2.11	0.80	1.69	11.57	757.56
MW-07	05/02/94	769.13	14.12	13.05	1.07	0.80	0.86	13.26	755.87
MW-07	07/18/94	769.13	14.96	13.96	1.00	0.80	0.80	14.16	754.97
MW-07	09/29/94	769.13	16.20	15.00	1.20	0.80	0.96	15.24	753.89
MW-07	01/31/95	769.13	14.53	13.39	1.14	0.80	0.91	13.62	755.51
MW-07	04/14/95	769.13	13.66	12.86	0.80	0.80	0.64	13.02	756.11
MW-07	08/07/95	769.13	14.83	14.40	0.43	0.80	0.34	14.49	754.64
MW-07	02/13/96	769.13	15.03	14.51	0.52	0.80	0.42	14.61	754.52
MW-07	03/12/96	769.13	15.79	15.15	0.64	0.80	0.51	15.28	753.85
MW-08	04/21/89	769.07	13.92	13.21	0.71	0.80	0.57	13.35	755.72
MW-08	04/26/89	769.07	15.37	13.33	2.04	0.80	1.63	13.74	755.33
MW-08	12/05/89	769.07	14.80	13.54	1.26	0.80	1.01	13.79	755.28
MW-08	01/30/90	769.07	14.10	12.77	1.33	0.80	1.06	13.04	756.03
MW-08	10/17/90	769.07	11.46	11.41	0.05	0.80	0.04	11.42	757.65
MW-08	10/20/92	769.07	11.73	11.60	0.13	0.80	0.10	11.63	757.44
MW-08	11/13/92	769.07	11.23	11.01	0.22	0.80	0.18	11.05	758.02
MW-08	12/21/92	769.07	12.79	12.39	0.40	0.80	0.32	12.47	756.60
MW-08	04/05/93	769.07	10.71	10.59	0.12	0.80	0.10	10.61	758.46
MW-08	05/02/94	769.07	12.09	11.72	0.37	0.80	0.30	11.79	757.28
MW-08	07/18/94	769.07	12.01	11.98	0.03	0.80	0.02	11.99	757.08
MW-08	09/29/94	769.07	14.61	14.53	0.08	0.80	0.06	14.55	754.52
MW-08	01/31/95	769.07	11.64	11.58	0.06	0.80	0.05	11.59	757.48
MW-08	04/14/95	769.07	11.70	11.63	0.07	0.80	0.06	11.64	757.43
MW-08	08/07/95	769.07	14.22	14.00	0.22	0.80	0.18	14.04	755.03
MW-08	02/13/96	769.07	15.00	14.06	0.94	0.80	0.75	14.25	754.82

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
MW-08	03/12/96	769.07	14.24	13.97	0.27	0.80	0.22	14.02	755.05
MW-09	04/21/89	769.28	13.36	---	NA	NA	13.36	755.92	
MW-09	04/26/89	769.28	13.58	---	NA	NA	13.58	755.70	
MW-09	12/05/89	769.28	15.40	13.62	1.78	0.80	1.42	13.98	755.30
MW-09	01/30/90	769.28	13.22	13.09	0.13	0.80	0.10	13.12	756.16
MW-09	10/17/90	769.28	13.61	11.58	2.03	0.80	1.62	11.99	757.29
MW-09	10/20/92	769.28	12.81	---	NA	NA	12.81	756.47	
MW-09	11/13/92	769.28	14.70	12.21	2.49	0.80	1.99	12.71	756.57
MW-09	12/21/92	769.28	14.03	12.60	1.43	0.80	1.14	12.89	756.39
MW-09	04/05/93	769.28	11.09 SHEEN	---	NA	NA	11.09	758.19	
MW-09	05/02/94	769.28	13.65	12.77	0.88	0.80	0.70	12.95	756.33
MW-09	07/18/94	769.28	15.76	13.25	2.51	0.80	2.01	13.75	755.53
MW-09	09/29/94	769.28	16.51	14.58	1.93	0.80	1.54	14.97	754.31
MW-09	01/31/95	769.28	15.14	12.88	2.26	0.80	1.81	13.33	755.95
MW-09	04/14/95	769.28	13.19	12.68	0.51	0.80	0.41	12.78	756.50
MW-09	08/07/95	769.28	15.23	13.84	1.39	0.80	1.11	14.12	755.16
MW-09	02/13/96	769.28	15.07	14.17	0.90	0.80	0.72	14.35	754.93
MW-09	03/12/96	769.28	15.15	14.91	0.24	0.80	0.19	14.96	754.32
MW-10	12/05/89	766.11	11.58	9.24	2.34	0.80	1.87	9.71	756.40
MW-10	01/31/90	766.11	11.92	8.73	3.19	0.80	2.55	9.37	756.74
MW-10	10/17/90	766.11	12.18	7.16	5.02	0.80	4.02	8.16	757.95
MW-10	10/20/92	766.11	10.04	8.95	1.09	0.80	0.87	9.17	756.94
MW-10	11/13/92	766.11	9.98	8.38	1.60	0.80	1.28	8.70	757.41
MW-10	12/21/92	766.11	11.80	8.34	3.46	0.80	2.77	9.03	757.08
MW-10	04/05/93	766.11	9.87	6.90	2.97	0.80	2.38	7.49	756.62
MW-10	05/02/94	766.11	10.80	8.43	2.37	0.80	1.90	8.90	757.21
MW-10	07/18/94	766.11	10.52	8.71	1.81	0.80	1.45	9.07	757.04
MW-10	09/29/94	766.11	13.49	10.75	2.74	0.80	2.19	11.30	754.81
MW-10	01/31/95	766.11	10.10	8.39	1.71	0.80	1.37	8.73	757.38
MW-10	04/14/95	766.11	10.03	8.63	1.40	0.80	1.12	8.91	757.20
MW-10	08/07/95	766.11	11.53	9.73	1.80	0.80	1.44	10.09	756.02
MW-10	02/13/96	766.11	11.34	10.15	1.19	0.80	0.95	10.39	755.72
MW-11	12/05/89	769.98	15.72	14.74	0.98	0.80	0.78	14.94	755.04
MW-11	10/17/90	769.98	15.42	12.58	2.84	0.80	2.27	13.15	756.83

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M /D /Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV
MW-11	10/20/92	769.98	15.59	13.69	1.90	0.80	1.52	14.07	755.91
MW-11	11/13/92	769.98	15.37	13.28	2.09	0.80	1.67	13.70	756.28
MW-11	12/21/92	769.98	15.68	13.53	2.15	0.80	1.72	13.96	756.02
MW-11	04/05/93	769.98	14.96	11.95	3.01	0.80	2.41	12.55	757.43
MW-11	05/02/94	769.98	16.00	13.60	2.40	0.80	1.92	14.08	755.90
MW-11	07/18/94	769.98	17.19	14.26	2.93	0.80	2.34	14.85	755.13
MW-11	09/29/94	769.98	17.87	15.45	2.42	0.80	1.94	15.93	754.05
MW-11	01/31/95	769.98	15.87	13.75	2.12	0.80	1.70	14.17	755.81
MW-11	04/14/95	769.98	16.06	13.39	2.67	0.80	2.14	13.92	756.06
MW-11	08/07/95	769.98	16.62	14.78	1.84	0.80	1.47	15.15	754.83
MW-11	02/13/96	769.98	16.92	14.98	1.94	0.80	1.55	15.37	754.61
MW-12	12/05/89	768.85	14.53	13.69	0.84	0.80	0.67	13.86	754.99
MW-12	01/30/90	768.85	13.92	12.84	1.08	0.80	0.86	13.06	755.79
MW-12	10/17/90	768.85	12.05	11.71	0.34	0.80	0.27	11.78	757.07
MW-12	10/20/92	768.85	13.54	12.07	1.47	0.80	1.18	12.36	756.49
MW-12	11/13/92	768.85	13.64	12.15	1.49	0.80	1.19	12.45	756.40
MW-12	12/21/92	768.85	14.02	12.49	1.53	0.80	1.22	12.80	756.05
MW-12	04/05/93	768.85	11.30	10.99	0.31	0.80	0.25	11.05	757.80
MW-12	05/02/94	768.85	13.71	12.60	1.11	0.80	0.89	12.82	756.03
MW-12	07/18/94	768.85	14.25	13.53	0.72	0.80	0.58	13.67	755.18
MW-12	09/29/94	768.85	15.17	14.70	0.47	0.80	0.38	14.79	754.06
MW-12	01/31/95	768.85	14.23	12.97	1.26	0.80	1.01	13.22	755.63
MW-12	04/14/95	768.85	13.55	12.42	1.13	0.80	0.90	12.65	756.20
MW-12	08/07/95	768.85	13.84	---	NA	NA	13.84	755.01	
MW-12	02/13/96	768.85	14.20	14.11	0.09	0.80	0.07	14.13	754.72
MW-12	03/12/96	768.85	14.95	14.76	0.19	0.80	0.15	14.80	754.05
MW-13	12/05/89	768.83	14.02	13.41	0.61	0.80	0.49	13.53	755.30
MW-13	01/30/90	768.83	13.11	12.72	0.39	0.80	0.31	12.80	756.03
MW-13	10/17/90	768.83	12.72	11.35	1.37	0.80	1.10	11.62	757.21
MW-13	10/20/92	768.83	13.30	12.30	1.00	0.80	0.80	12.50	756.33
MW-13	11/13/92	768.83	13.56	11.97	1.59	0.80	1.27	12.29	756.54
MW-13	12/21/92	768.83	14.42	12.16	2.26	0.80	1.81	12.61	756.22
MW-13	04/05/93	768.83	10.91	10.73	0.18	0.80	0.14	10.77	758.06
MW-13	05/02/94	768.83	13.11	12.44	0.67	0.80	0.54	12.57	756.26
MW-13	07/18/94	768.83	14.65	13.08	1.57	0.80	1.26	13.39	755.44

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

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Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
MW-13	09/29/94	768.83	14.29	---		NA	NA	14.29	754.54
MW-13	01/31/95	768.83	14.93	12.55	2.38	0.80	1.90	13.03	755.80
MW-13	04/14/95	768.83	13.48	12.22	1.26	0.80	1.01	12.47	756.36
MW-13	08/07/95	768.83	15.25	13.40	1.85	0.80	1.48	13.77	755.06
MW-13	02/13/96	768.83	15.50	13.70	1.80	0.80	1.44	14.06	754.77
MW-13	03/12/96	768.83	16.16	14.34	1.82	0.80	1.46	14.70	754.13
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MW-14		765.79	CASING BROKEN		---	---	---	---	
MW-14	12/05/89	765.79	15.86	11.82	4.04	0.80	3.23	12.63	753.16
MW-14	01/30/90	765.79	15.86	10.98	4.88	0.80	3.90	11.96	753.83
MW-14	10/17/90	765.79	13.62	9.73	3.89	0.80	3.11	10.51	755.28
MW-14	11/13/92	765.79	7.78	7.36	0.42	0.80	0.34	7.44	758.35
MW-14	12/21/92	765.79	8.25	7.93	0.32	0.80	0.26	7.99	757.80
MW-14	04/05/93	765.79	7.09	6.82	0.27	0.80	0.22	6.87	758.92
MW-14	05/02/94	765.79	8.46	7.51	0.95	0.80	0.76	7.70	758.09
MW-14	07/18/94	765.79	8.60	8.26	0.34	0.80	0.27	8.33	757.46
MW-14	09/29/94	765.79	10.91	9.95	0.96	0.80	0.77	10.14	755.65
MW-14	01/31/95	765.79			NA	NA	NA	NA	NA
MW-14	04/14/95	765.79	7.95	7.89	0.06	0.80	0.05	7.90	757.89
MW-14	08/07/95	765.79	9.43	9.30	0.13	0.80	0.10	9.33	756.46
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MW-15	12/05/89	767.06	11.72	---		NA	NA	11.72	755.34
MW-15	01/30/90	767.06	11.12	---		NA	NA	11.12	755.94
MW-15	10/17/90	767.06	9.72	---		NA	NA	9.72	757.34
MW-15	10/20/92	767.06	10.69	---		NA	NA	10.69	756.37
MW-15	11/13/92	767.06	10.35	---		NA	NA	10.35	756.71
MW-15	12/21/92	767.06	10.64	---		NA	NA	10.64	756.42
MW-15	04/05/93	767.06	9.05	---		NA	NA	9.05	758.01
MW-15	05/02/94	767.06	13.73	---		NA	NA	13.73	753.33
MW-15	07/18/94	767.06	11.42	---		NA	NA	11.42	755.64
MW-15	09/29/94	767.06	12.66	---		NA	NA	12.66	754.40
MW-15	01/31/95	767.06	10.99	---		NA	NA	10.99	756.07
MW-15	04/14/95	767.06	10.57	---		NA	NA	10.57	756.49
MW-15	08/07/95	767.06	11.89	---		NA	NA	11.89	755.17
MW-15	02/13/96	767.06	12.14	---		NA	NA	12.14	754.92
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MW-16	12/05/89	766.76	11.87	11.84	0.03	0.80	0.02	11.85	754.91

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

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Well ID	DATE GAUGED M / D / Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV
MW-16	01/30/90	766.76	10.83	---	NA	NA	NA	10.83	755.93
MW-16	10/17/90	766.76	9.34	9.18	0.16	0.80	0.13	9.21	757.55
MW-16	10/21/92	766.76	12.54	9.03	3.51	0.80	2.81	9.73	757.03
MW-16	11/13/92	766.76	11.36	9.68	1.68	0.80	1.34	10.02	756.74
MW-16	12/21/92	766.76	12.36	9.98	2.38	0.80	1.90	10.46	756.30
MW-16	04/05/93	766.76	8.70	8.57	0.13	0.80	0.10	8.60	758.16
MW-16	05/02/94	766.76	12.71	10.40	2.31	0.80	1.85	10.86	755.90
MW-16	07/18/94	766.76	12.71	11.23	1.48	0.80	1.18	11.53	755.23
MW-16	09/29/94	766.76	12.97	12.55	0.42	0.80	0.34	12.63	754.13
MW-16	01/31/95	766.76	10.44	---	NA	NA	NA	10.44	756.32
MW-16	04/14/95	766.76	12.19	10.33	1.86	0.80	1.49	10.70	756.06
MW-16	08/07/95	766.76	15.03	11.73	3.30	0.80	2.64	12.39	754.37
MW-16	02/13/96	766.76	15.49	11.85	3.64	0.80	2.91	12.58	754.18
MW-16	03/12/96	766.76	15.65	12.45	3.20	0.80	2.56	13.09	753.67
MW-17	12/05/89	766.31	11.27	---	NA	NA	NA	11.27	755.04
MW-17	01/31/90	766.31	10.69	---	NA	NA	NA	10.69	755.62
MW-17	10/17/90	766.31	9.58	---	NA	NA	NA	9.58	756.73
MW-17	10/20/92	766.31	10.40	---	NA	NA	NA	10.40	755.91
MW-17	11/13/92	766.31	10.04	---	NA	NA	NA	10.04	756.27
MW-17	12/21/92	766.31	10.26	---	NA	NA	NA	10.26	756.05
MW-17	04/05/93	766.31	9.12	---	NA	NA	NA	9.12	757.19
MW-17	05/02/94	766.31	10.39	---	NA	NA	NA	10.39	755.92
MW-17	07/18/94	766.31	11.06	---	NA	NA	NA	11.06	755.25
MW-17	09/29/94	766.31	12.13	---	NA	NA	NA	12.13	754.18
MW-17	01/31/95	766.31	10.58	---	NA	NA	NA	10.58	755.73
MW-17	04/14/95	766.31	10.23	---	NA	NA	NA	10.23	756.08
MW-17	08/07/95	766.31	11.47	---	NA	NA	NA	11.47	754.84
MW-17	02/13/96	766.31	11.61	---	NA	NA	NA	11.61	754.70
MW-18	12/05/89	767.85	15.19	12.69	2.50	0.80	2.00	13.19	754.66
MW-18	10/17/90	767.85	13.12	10.80	2.32	0.80	1.86	11.26	756.59
MW-18	10/20/92	767.85	12.34	11.76	0.58	0.80	0.46	11.88	755.97
MW-18	11/13/92	767.85	12.35	11.49	0.86	0.80	0.69	11.66	756.19
MW-18	12/21/92	767.85	13.65	11.71	1.94	0.80	1.55	12.10	755.75
MW-18	04/05/93	767.85	12.38	10.04	2.34	0.80	1.87	10.51	757.34
MW-18	05/02/94	767.85	13.20	12.50	0.70	0.80	0.56	12.64	755.21

FLUOR DANIEL GTI
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MW-18	07/18/94	767.85	15.28	14.37	0.91	0.80	0.73	14.55	753.30
MW-18	09/29/94	767.85	15.50	14.70	0.80	0.80	0.64	14.86	752.99
MW-18	10/11/94	767.85	15.09	14.76	0.33	0.80	0.26	14.83	753.02
MW-18	01/31/95	767.85	13.60	13.05	0.55	0.80	0.44	13.16	754.69
MW-18	04/14/95	767.85	12.98	12.41	0.57	0.80	0.46	12.52	755.33
MW-18	08/07/95	767.85	13.73	13.66	0.07	0.80	0.06	13.67	754.18
MW-18	02/13/96	767.85	14.53	14.03	0.50	0.80	0.40	14.13	753.72
MW-19	12/05/89	763.80	9.04	---	NA	NA	9.04	754.76	
MW-19	01/31/90	763.80	8.42	---	NA	NA	8.42	755.38	
MW-19	10/17/90	763.80	6.91	---	NA	NA	6.91	756.89	
MW-19	10/20/92	763.80	7.75 SHEEN	---	NA	NA	7.75	756.05	
MW-19	11/13/92	763.80	7.50	---	NA	NA	7.50	756.30	
MW-19	12/21/92	763.80	7.93	---	NA	NA	7.93	755.87	
MW-19	01/07/93	763.80	5.10	---	NA	NA	5.10	758.70	
MW-19	04/05/93	763.80	6.17	---	NA	NA	6.17	757.63	
MW-19	05/02/94	763.80	8.15	---	NA	NA	8.15	755.65	
MW-19	07/18/94	763.80	9.43	---	NA	NA	9.43	754.37	
MW-19	09/29/94	763.80	10.36	---	NA	NA	10.36	753.44	
MW-19	10/11/94	763.80	9.66	---	NA	NA	9.66	754.14	
MW-19	01/31/95	763.80	8.54	---	NA	NA	8.54	755.26	
MW-19	04/14/95	763.80	8.82	---	NA	NA	8.82	754.98	
MW-19	08/07/95	763.80	8.79	---	NA	NA	8.79	755.01	
MW-19	02/13/96	763.80	9.59	---	NA	NA	9.59	754.21	
MW-19	03/12/96	763.80	10.22	---	NA	NA	10.22	753.58	
MW-20	12/05/89	763.44	8.66	---	NA	NA	8.66	754.78	
MW-20	01/31/90	763.44	8.30	8.04	0.26	0.80	0.21	8.09	755.35
MW-20	10/17/90	763.44	6.65	6.63	0.02	0.80	0.02	6.63	756.81
MW-20	10/20/92	763.44	7.23	7.21	0.02	0.80	0.02	7.21	756.23
MW-20	11/13/92	763.44	7.76	6.95	0.81	0.80	0.65	7.11	756.33
MW-20	12/21/92	763.44	7.34	---	NA	NA	7.34	756.10	
MW-20	01/07/93	763.44	5.85	4.67	1.18	0.80	0.94	4.91	758.53
MW-20	04/05/93	763.44	6.03	5.70	0.33	0.80	0.26	5.77	757.67
MW-20	05/02/94	763.44	8.45	7.41	1.04	0.80	0.83	7.62	755.82
MW-20	07/18/94	763.44	10.57	8.42	2.15	0.80	1.72	8.85	754.59
MW-20	09/29/94	763.44	11.45	9.61	1.84	0.80	1.47	9.98	753.46

FLUOR DANIEL GTI
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MW-20	10/20/94	763.44	9.80	9.17	0.63	0.80	0.50	9.30	754.14
MW-20	10/25/94	763.44	9.43	8.91	0.52	0.80	0.42	9.01	754.43
MW-20	11/02/94	763.44	9.36	8.13	1.23	0.80	0.98	8.38	755.06
MW-20	11/09/94	763.44	7.43	6.82	0.61	0.80	0.49	6.94	756.50
MW-20	11/30/94	763.44	8.69	7.77	0.92	0.80	0.74	7.95	755.49
MW-20	12/22/94	763.44	9.88	7.71	2.17	0.80	1.74	8.14	755.30
MW-20	12/28/94	763.44	10.63	7.82	2.81	0.80	2.25	8.38	755.06
MW-20	01/04/95	763.44	9.95	8.58	1.37	0.80	1.10	8.85	754.59
MW-20	01/12/95	763.44	9.22	8.60	0.62	0.80	0.50	8.72	754.72
MW-20	01/18/95	763.44	8.54	7.57	0.97	0.80	0.78	7.76	755.68
MW-20	01/23/95	763.44	7.60	7.18	0.42	0.80	0.34	7.26	756.18
MW-20	01/31/95	763.44	9.69	7.90	1.79	0.80	NA	7.90	755.54
MW-20	02/08/95	763.44	10.12	8.98	1.14	0.80	0.91	9.21	754.23
MW-20	02/14/95	763.44	10.48	9.38	1.10	0.80	0.88	9.60	753.84
MW-20	03/01/95	763.44	10.01	8.40	1.61	0.80	NA	8.72	754.72
MW-20	03/10/95	763.44	7.38	---	---	NA	NA	7.38	756.06
MW-20	03/14/95	763.44	6.83	6.73	0.10	0.80	0.08	6.75	756.69
MW-20	03/23/95	763.44	8.83	8.32	0.51	0.80	0.41	8.42	755.02
MW-20	03/31/95	763.44	9.14	8.31	0.83	0.80	0.66	8.48	754.96
MW-20	04/07/95	763.44	9.35	8.63	0.72	0.80	0.58	8.77	754.67
MW-20	04/14/95	763.44	7.49	7.27	0.22	0.80	0.18	7.31	756.13
MW-20	04/19/95	763.44	8.98	7.83	1.15	0.80	NA	8.06	755.38
MW-20	04/27/95	763.44	9.42	7.70	1.72	0.80	1.38	8.04	755.40
MW-20	05/05/95	763.44	9.40	7.87	1.53	0.80	1.22	8.18	755.26
MW-20	05/11/95	763.44	7.64	7.28	0.36	0.80	0.29	7.35	756.09
MW-20	05/19/95	763.44	9.82	8.15	1.67	0.80	1.34	8.48	754.96
MW-20	05/24/95	763.44	8.90	8.37	0.53	0.80	0.42	8.48	754.96
MW-20	06/01/95	763.44	8.88	8.26	0.62	0.80	0.50	8.38	755.06
MW-20	06/09/95	763.44	8.77	8.24	0.53	0.80	0.42	8.35	755.09
MW-20	06/15/95	763.44	10.67	8.97	1.70	0.80	1.36	9.31	754.13
MW-20	06/19/95	763.44	9.95	9.23	0.72	0.80	0.58	9.37	754.07
MW-20	07/03/95	763.44	8.86	8.71	0.15	0.80	0.12	8.74	754.70
MW-20	07/14/95	763.44	9.58	9.30	0.28	0.80	0.22	9.36	754.08
MW-20	07/21/95	763.44	9.42	9.28	0.14	0.80	0.11	9.31	754.13
MW-20	07/26/95	763.44	8.88	8.78	0.10	0.80	0.08	8.80	754.64
MW-20	08/07/95	763.44	8.29	---	---	NA	NA	8.29	755.15
MW-20	08/29/95	763.44	9.81	9.68	0.13	0.80	0.10	9.71	753.73

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
MW-20	09/06/95	763.44	9.90	9.66	0.24	0.80	0.19	9.71	753.73
MW-20	10/25/95	763.44	10.53	10.39	0.14	0.80	0.11	10.42	753.02
MW-20	11/01/95	763.44	9.29	8.69	0.60	0.80	0.48	8.81	754.63
MW-20	11/10/95	763.44	13.02	9.71	3.31	0.80	2.65	10.37	753.07
MW-20	11/22/95	763.44	12.78	8.85	3.93	0.80	3.14	9.64	753.80
MW-20	12/08/95	763.44	10.94	8.53	2.41	0.80	1.93	9.01	754.43
MW-20	12/11/95	763.44	11.73	9.12	2.61	0.80	2.09	9.64	753.80
MW-20	12/29/95	763.44	12.28	10.11	2.17	0.80	1.74	10.54	752.90
MW-20	01/05/96	763.44	12.89	10.35	2.54	0.80	2.03	10.86	752.58
MW-20	01/25/96	763.44	10.80	8.95	1.85	0.80	1.48	9.32	754.12
MW-20	02/05/96	763.44	12.53	10.14	2.39	0.80	1.91	10.62	752.82
MW-20	02/13/96	763.44	10.16	8.86	1.30	0.80	1.04	9.12	754.32
MW-20	02/29/96	763.44	10.77	8.89	1.88	0.80	1.50	9.27	754.17
MW-20	03/06/96	763.44	9.81	8.94	0.87	0.80	0.70	9.11	754.33
MW-20	03/12/96	763.44	10.61	9.74	0.87	0.80	0.70	9.91	753.53
MW-20	03/22/96	763.44	10.66	9.68	0.98	0.80	0.78	9.88	753.56
MW-20	03/26/96	763.44	12.61	9.68	2.93	0.80	2.34	10.27	753.17
MW-21	12/05/89	764.34	9.36	---	NA	NA	9.36	754.98	
MW-21	01/31/90	764.34	8.81	---	NA	NA	8.81	755.53	
MW-21	10/17/90	764.34	7.40	---	NA	NA	7.40	756.94	
MW-21	10/20/92	764.34	8.03	---	NA	NA	8.03	756.31	
MW-21	11/13/92	764.34	7.89	---	NA	NA	7.89	756.45	
MW-21	12/21/92	764.34	8.31	---	NA	NA	8.31	756.03	
MW-21	01/07/93	764.34	5.54	---	NA	NA	5.54	758.80	
MW-21	04/05/93	764.34	6.56	---	NA	NA	6.56	757.78	
MW-21	05/02/94	764.34	8.38	---	NA	NA	8.38	755.96	
MW-21	07/18/94	764.34	9.27	---	NA	NA	9.27	755.07	
MW-21	09/29/94	764.34	10.38	---	NA	NA	10.38	753.96	
MW-21	01/31/95	764.34	8.82	---	NA	NA	8.82	755.52	
MW-21	04/14/95	764.34	8.18	---	NA	NA	8.18	756.16	
MW-21	08/07/95	764.34	9.35	---	NA	NA	9.35	754.99	
MW-21	02/13/96	764.34	9.84	---	NA	NA	9.84	754.50	
RW-01	10/05/93	762.57	7.12	7.05	0.07	0.80	0.06	7.06	755.51
RW-01	10/13/93	762.57	7.44	7.39	0.05	0.80	0.04	7.40	755.17
RW-01	05/26/94	762.57	8.32	8.12	0.20	0.80	0.16	8.16	754.41

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

NM = Not Measured

Location: Kalamazoo, Michigan

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-01	06/01/94	762.57	8.64	8.51	0.13	0.80	0.10	8.54	754.03
RW-01	06/14/94	762.57	8.27	8.10	0.17	0.80	0.14	8.13	754.44
RW-01	07/09/94	762.57	6.65	6.55	0.10	0.80	0.08	6.57	756.00
RW-01	07/19/94	762.57	7.69	7.63	0.06	0.80	0.05	7.64	754.93
RW-01	07/25/94	762.57	7.28	7.25	0.03	0.80	0.02	7.26	755.31
RW-01	08/02/94	762.57	7.33	7.27	0.06	0.80	0.05	7.28	755.29
RW-01	08/10/94	762.57	8.27	8.25	0.02	0.80	0.02	8.25	754.32
RW-01	08/19/94	762.57	5.36	---	NA	NA	5.36	757.21	
RW-01	08/24/94	762.57	6.66	---	NA	NA	6.66	755.91	
RW-01	09/03/94	762.57	7.84	7.79	0.05	0.80	0.04	7.80	754.77
RW-01	09/07/94	762.57	8.16	8.15	0.01	0.80	0.01	8.15	754.42
RW-01	09/29/94	762.57	8.65	8.62	0.03	0.80	0.02	8.63	753.94
RW-01	10/05/94	762.57	8.07	8.05	0.02	0.80	0.02	8.05	754.52
RW-01	10/11/94	762.57	8.04	---	NA	NA	8.04	754.53	
RW-01	10/20/94	762.57	8.42	8.38	0.04	0.80	0.03	8.39	754.18
RW-01	10/25/94	762.57	8.34	8.31	0.03	0.80	0.02	8.32	754.25
RW-01	11/02/94	762.57	7.69	7.67	0.02	0.80	0.02	7.67	754.90
RW-01	11/09/94	762.57	4.26	4.24	0.02	0.80	0.02	4.24	758.33
RW-01	11/21/94	762.57	7.40	7.39	0.01	0.80	0.01	7.39	755.18
RW-01	11/30/94	762.57	7.16	7.13	0.03	0.80	0.02	7.14	755.43
RW-01	01/12/95	762.57	7.75	7.73	0.02	0.80	0.02	7.73	754.84
RW-01	01/18/95	762.57	6.93	6.85	0.08	0.80	0.06	6.87	755.70
RW-01	01/23/95	762.57	6.48	6.43	0.05	0.80	0.04	6.44	756.13
RW-01	01/31/95	762.57	7.19	7.11	0.08	0.80	0.06	7.13	755.44
RW-01	02/08/95	762.57	8.19	7.97	0.22	0.80	0.18	8.01	754.56
RW-01	02/14/95	762.57	8.48	8.37	0.11	0.80	0.09	8.39	754.18
RW-01	02/21/95	762.57	7.88	7.85	0.03	0.80	0.02	7.86	754.71
RW-01	03/01/95	762.57	7.69	7.65	0.04	0.80	0.03	7.66	754.91
RW-01	03/10/95	762.57	6.57	6.54	0.03	0.80	0.02	6.55	756.02
RW-01	03/14/95	762.57	6.19	6.13	0.06	0.80	0.05	6.14	756.43
RW-01	03/23/95	762.57	7.28	7.22	0.06	0.80	0.05	7.23	755.34
RW-01	03/31/95	762.57	7.45	7.38	0.07	0.80	0.06	7.39	755.18
RW-01	04/07/95	762.57	7.82	7.72	0.10	0.80	0.08	7.74	754.83
RW-01	04/14/95	762.57	6.75	6.51	0.24	0.80	0.19	6.56	756.01
RW-01	04/19/95	762.57	7.07	7.01	0.06	0.80	0.05	7.02	755.55
RW-01	04/27/95	762.57	7.12	7.07	0.05	0.80	0.04	7.08	755.49
RW-01	05/05/95	762.57	7.13	7.07	0.06	0.80	0.05	7.08	755.49

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M / D / Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV
RW-01	05/11/95	762.57	6.52	6.47	0.05	0.80	0.04	6.48	756.09
RW-01	05/19/95	762.57	7.28	7.20	0.08	0.80	0.06	7.22	755.35
RW-01	05/24/95	762.57	7.55	7.50	0.05	0.80	0.04	7.51	755.06
RW-01	06/01/95	762.57	7.49	7.43	0.06	0.80	0.05	7.44	755.13
RW-01	06/09/95	762.57	7.36	7.28	0.08	0.80	0.06	7.30	755.27
RW-01	06/15/95	762.57	8.13	8.07	0.06	0.80	0.05	8.08	754.49
RW-01	06/19/95	762.57	8.37	8.33	0.04	0.80	0.03	8.34	754.23
RW-01	07/03/95	762.57	7.80	7.77	0.03	0.80	0.02	7.78	754.79
RW-01	07/14/95	762.57	8.38	8.34	0.04	0.80	0.03	8.35	754.22
RW-01	07/21/95	762.57	8.37	8.33	0.04	0.80	0.03	8.34	754.23
RW-01	07/26/95	762.57	7.94	7.91	0.03	0.80	0.02	7.92	754.65
RW-01	08/07/95	762.57	8.01	7.98	0.03	0.80	0.02	7.99	754.58
RW-01	09/06/95	762.57	8.56	8.48	0.08	0.80	0.06	8.50	754.07
RW-01	10/25/95	762.57	9.56	9.44	0.12	0.80	NA	9.46	753.11
RW-01	11/01/95	762.57	8.04	8.00	0.04	0.80	0.03	8.01	754.56
RW-01	11/10/95	762.57	9.12	9.02	0.10	0.80	0.08	9.04	753.53
RW-01	11/22/95	762.57	7.52	7.39	0.13	0.80	0.10	7.42	755.15
RW-01	12/08/95	762.57	8.89	8.84	0.05	0.80	0.04	8.85	753.72
RW-01	12/11/95	762.57	8.39	8.30	0.09	0.80	0.07	8.32	754.25
RW-01	12/29/95	762.57	9.41	9.38	0.03	0.80	0.02	9.39	753.18
RW-01	01/05/96	762.57	9.64	9.59	0.05	0.80	0.04	9.60	752.97
RW-01	01/25/96	762.57	8.40	8.35	0.05	0.80	0.04	8.36	754.21
RW-01	02/05/96	762.57	9.35	9.30	0.05	0.80	0.04	9.31	753.26
RW-01	02/13/96	762.57	6.07	6.03	0.04	0.80	0.03	6.04	756.53
RW-01	02/29/96	762.57	8.37	8.35	0.02	0.80	0.02	8.35	754.22
RW-01	03/06/96	762.57	8.14	8.11	0.03	0.80	0.02	8.12	754.45
RW-01	03/12/96	762.57	8.81	8.75	0.06	0.80	0.05	8.76	753.81
RW-01	03/22/96	762.57	8.90	8.87	0.03	0.80	0.02	8.88	753.69
RW-01	03/26/96	762.57	9.03	8.85	0.18	0.80	0.14	8.89	753.68
RW-01	04/30/96	762.57	6.83	6.79	0.04	0.80	0.03	6.80	755.77
RW-01	05/09/96	762.57	6.69	6.64	0.05	0.80	0.04	6.65	755.92
RW-01	05/17/96	762.57	6.80	6.76	0.04	0.80	0.03	6.77	755.80
RW-01	05/21/96	762.57	7.45	7.43	0.02	0.80	0.02	7.43	755.14
RW-01	08/29/96	762.57	8.61	8.52	0.09	0.80	0.07	8.54	754.03
RW-02	10/05/93	761.57	6.09	---		NA	NA	6.09	755.48
RW-02	10/13/93	761.57	6.44	6.40	0.04	0.80	0.03	6.41	755.16

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-02	05/26/94	761.57	7.35	7.12	0.23	0.80	0.18	7.17	754.40
RW-02	06/01/94	761.57	7.54	7.35	0.19	0.80	0.15	7.39	754.18
RW-02	06/14/94	761.57	7.20	7.12	0.08	0.80	0.06	7.14	754.43
RW-02	07/09/94	761.57	5.60	5.50	0.10	0.80	0.08	5.52	756.05
RW-02	07/19/94	761.57	6.73	6.67	0.06	0.80	0.05	6.68	754.89
RW-02	07/25/94	761.57	6.30	6.27	0.03	0.80	0.02	6.28	755.29
RW-02	08/02/94	761.57	6.35	6.33	0.02	0.80	0.02	6.33	755.24
RW-02	08/10/94	761.57	7.20	7.17	0.03	0.80	0.02	7.18	754.39
RW-02	08/19/94	761.57	4.27	---	NA	NA	4.27	757.30	
RW-02	08/24/94	761.57	5.69	5.65	0.04	0.80	0.03	5.66	755.91
RW-02	09/03/94	761.57	6.85	6.81	0.04	0.80	0.03	6.82	754.75
RW-02	09/07/94	761.57	7.16	7.15	0.01	0.80	0.01	7.15	754.42
RW-02	09/29/94	761.57	7.55	---	NA	NA	7.55	754.02	
RW-02	10/05/94	761.57	7.08	7.05	0.03	0.80	0.02	7.06	754.51
RW-02	10/11/94	761.57	7.00	6.99	0.01	0.80	0.01	6.99	754.58
RW-02	10/20/94	761.57	7.42	7.37	0.05	0.80	0.04	7.38	754.19
RW-02	10/25/94	761.57	7.34	7.29	0.05	0.80	0.04	7.30	754.27
RW-02	11/02/94	761.57	6.71	6.68	0.03	0.80	0.02	6.69	754.88
RW-02	11/09/94	761.57	5.24	5.22	0.02	0.80	NA	5.23	756.34
RW-02	11/21/94	761.57	6.40	6.34	0.06	0.80	0.05	6.35	755.22
RW-02	11/30/94	761.57	6.17	6.10	0.07	0.80	0.06	6.11	755.46
RW-02	12/22/94	761.57	6.27	6.05	0.22	0.80	0.18	6.09	755.48
RW-02	12/28/94	761.57	6.37	6.15	0.22	0.80	0.18	6.19	755.38
RW-02	01/04/95	761.57	6.73	6.60	0.13	0.80	0.10	6.63	754.94
RW-02	01/12/95	761.57	6.71	6.70	0.01	0.80	0.01	6.70	754.87
RW-02	01/18/95	761.57	6.05	5.87	0.18	0.80	0.14	5.91	755.66
RW-02	01/23/95	761.57	5.47	5.43	0.04	0.80	0.03	5.44	756.13
RW-02	01/31/95	761.57	6.20	6.10	0.10	0.80	0.08	6.12	755.45
RW-02	02/08/95	761.57	7.25	6.94	0.31	0.80	0.25	7.00	754.57
RW-02	02/14/95	761.57	7.57	7.39	0.18	0.80	0.14	7.43	754.14
RW-02	02/21/95	761.57	6.88	6.85	0.03	0.80	0.02	6.86	754.71
RW-02	03/01/95	761.57	6.70	6.67	0.03	0.80	0.02	6.68	754.89
RW-02	03/10/95	761.57	5.64	5.55	0.09	0.80	0.07	5.57	756.00
RW-02	03/14/95	761.57	5.19	5.16	0.03	0.80	0.02	5.17	756.40
RW-02	03/23/95	761.57	6.34	6.23	0.11	0.80	0.09	6.25	755.32
RW-02	03/31/95	761.57	6.47	6.40	0.07	0.80	0.06	6.41	755.16
RW-02	04/07/95	761.57	6.83	6.74	0.09	0.80	0.07	6.76	754.81

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-02	04/14/95	761.57	5.57	5.53	0.04	0.80	0.03	5.54	756.03
RW-02	04/19/95	761.57	6.09	6.03	0.06	0.80	0.05	6.04	755.53
RW-02	04/27/95	761.57	6.13	6.09	0.04	0.80	0.03	6.10	755.47
RW-02	05/05/95	761.57	6.14	6.08	0.06	0.80	0.05	6.09	755.48
RW-02	05/11/95	761.57	5.53	5.48	0.05	0.80	0.04	5.49	756.08
RW-02	05/19/95	761.57	6.26	6.20	0.06	0.80	0.05	6.21	755.36
RW-02	05/24/95	761.57	6.57	6.53	0.04	0.80	0.03	6.54	755.03
RW-02	06/01/95	761.57	6.45	6.41	0.04	0.80	0.03	6.42	755.15
RW-02	06/09/95	761.57	6.38	6.33	0.05	0.80	0.04	6.34	755.23
RW-02	06/15/95	761.57	7.13	7.08	0.05	0.80	0.04	7.09	754.48
RW-02	06/19/95	761.57	7.39	7.35	0.04	0.80	0.03	7.36	754.21
RW-02	07/03/95	761.57	6.84	6.76	0.08	0.80	0.06	6.78	754.79
RW-02	07/14/95	761.57	7.37	7.33	0.04	0.80	0.03	7.34	754.23
RW-02	07/21/95	761.57	7.33	7.27	0.06	0.80	0.05	7.28	754.29
RW-02	07/26/95	761.57	6.96	6.89	0.07	0.80	0.06	6.90	754.67
RW-02	08/07/95	761.57	6.94	6.91	0.03	0.80	0.02	6.92	754.65
RW-02	09/06/95	761.57	7.57	7.49	0.08	0.80	0.06	7.51	754.06
RW-02	10/25/95	761.57	8.57	8.44	0.13	0.80	0.10	8.47	753.10
RW-02	11/01/95	761.57	7.06	7.03	0.03	0.80	0.02	7.04	754.53
RW-02	11/10/95	761.57	8.06	7.98	0.08	0.80	0.06	8.00	753.57
RW-02	11/22/95	761.57	7.46	7.37	0.09	0.80	0.07	7.39	754.18
RW-02	12/08/95	761.57	8.75	7.75	1.00	0.80	0.80	7.95	753.62
RW-02	12/11/95	761.57	7.34	7.14	0.20	0.80	0.16	7.18	754.39
RW-02	12/29/95	761.57	8.36	8.22	0.14	0.80	0.11	8.25	753.82
RW-02	01/05/96	761.57	8.63	8.54	0.09	0.80	0.07	8.56	753.01
RW-02	01/25/96	761.57	7.37	7.33	0.04	0.80	0.03	7.34	754.23
RW-02	02/05/96	761.57	8.39	8.31	0.08	0.80	0.06	8.33	753.24
RW-02	02/13/96	761.57	7.04	7.01	0.03	0.80	0.02	7.02	754.55
RW-02	02/29/96	761.57	7.38	7.35	0.03	0.80	0.02	7.36	754.21
RW-02	03/06/96	761.57	7.10	7.08	0.02	0.80	0.02	7.08	754.49
RW-02	03/12/96	761.57	7.80	7.72	0.08	0.80	0.06	7.74	753.83
RW-02	03/22/96	761.57	7.89	7.84	0.05	0.80	0.04	7.85	753.72
RW-02	03/26/96	761.57	7.90	7.82	0.08	0.80	0.06	7.84	753.73
RW-02	04/30/96	761.57	5.85	5.80	0.05	0.80	0.04	5.81	755.76
RW-02	05/09/96	761.57	5.94	5.89	0.05	0.80	0.04	5.90	755.67
RW-02	05/17/96	761.57	5.69	5.67	0.02	0.80	0.02	5.67	755.90
RW-02	05/21/96	761.57	6.45	6.44	0.01	0.80	0.01	6.44	755.13

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-02	08/29/96	761.57	7.63	7.53	0.10	0.80	0.08	7.55	754.02
RW-03	10/05/93	761.37	6.00	5.88	0.12	0.80	0.10	5.90	755.47
RW-03	10/13/93	761.37	6.42	6.24	0.18	0.80	0.14	6.28	755.09
RW-03	05/26/94	761.37	7.92	7.09	0.83	0.80	0.66	7.26	754.11
RW-03	06/01/94	761.37	8.30	7.71	0.59	0.80	0.47	7.83	753.54
RW-03	06/14/94	761.37	7.10	7.02	0.08	0.80	0.06	7.04	754.33
RW-03	07/09/94	761.37	5.32	5.25	0.07	0.80	0.06	5.26	756.11
RW-03	07/19/94	761.37	6.85	6.50	0.35	0.80	0.28	6.57	754.80
RW-03	07/25/94	761.37	6.29	6.19	0.10	0.80	0.08	6.21	755.16
RW-03	08/02/94	761.37	6.29	6.25	0.04	0.80	0.03	6.26	755.11
RW-03	08/10/94	761.37	7.22	7.17	0.05	0.80	0.04	7.18	754.19
RW-03	08/19/94	761.37	4.17	4.16	0.01	0.80	0.01	4.16	757.21
RW-03	08/24/94	761.37	5.50	5.45	0.05	0.80	0.04	5.46	755.91
RW-03	09/03/94	761.37	6.77	6.74	0.03	0.80	0.02	6.75	754.62
RW-03	09/07/94	761.37	7.03	7.00	0.03	0.80	0.02	7.01	754.36
RW-03	09/29/94	761.37	7.63	7.59	0.04	0.80	0.03	7.60	753.77
RW-03	10/05/94	761.37	6.94	6.91	0.03	0.80	0.02	6.92	754.45
RW-03	10/11/94	761.37	6.86	6.84	0.02	0.80	0.02	6.84	754.53
RW-03	10/20/94	761.37	7.30	7.24	0.06	0.80	0.05	7.25	754.12
RW-03	10/25/94	761.37	7.14	7.09	0.05	0.80	0.04	7.10	754.27
RW-03	11/02/94	761.37	6.47	6.46	0.01	0.80	0.01	6.46	754.91
RW-03	11/09/94	761.37	5.04	5.02	0.02	0.80	0.02	5.02	756.35
RW-03	11/21/94	761.37	6.27	6.23	0.04	0.80	0.03	6.24	755.13
RW-03	11/30/94	761.37	6.04	5.93	0.11	0.80	0.09	5.95	755.42
RW-03	12/22/94	761.37	6.08	6.00	0.08	0.80	0.06	6.02	755.35
RW-03	12/28/94	761.37	6.10	6.01	0.09	0.80	0.07	6.03	755.34
RW-03	01/04/95	761.37	6.53	6.50	0.03	0.80	0.02	6.51	754.86
RW-03	01/12/95	761.37	6.59	6.58	0.01	0.80	0.01	6.58	754.79
RW-03	01/18/95	761.37	5.70	5.67	0.03	0.80	0.02	5.68	755.69
RW-03	01/23/95	761.37	5.28	5.23	0.05	0.80	0.04	5.24	756.13
RW-03	01/31/95	761.37	5.97	5.95	0.02	0.80	0.02	5.95	755.42
RW-03	02/08/95	761.37	7.09	6.98	0.11	0.80	0.09	7.00	754.37
RW-03	02/14/95	761.37	7.37	7.33	0.04	0.80	0.03	7.34	754.03
RW-03	02/21/95	761.37	6.74	6.71	0.03	0.80	0.02	6.72	754.65
RW-03	03/01/95	761.37	6.56	6.53	0.03	0.80	0.02	6.54	754.83
RW-03	03/10/95	761.37	5.37	5.35	0.02	0.80	0.02	5.35	756.02

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-03	03/14/95	761.37	5.00	4.95	0.05	0.80	0.04	4.96	756.41
RW-03	03/23/95	761.37	6.14	6.10	0.04	0.80	0.03	6.11	755.26
RW-03	03/31/95	761.37	6.31	6.25	0.06	0.80	0.05	6.26	755.11
RW-03	04/07/95	761.37	6.67	6.64	0.03	0.80	0.02	6.65	754.72
RW-03	04/14/95	761.37	5.41	5.33	0.08	0.80	0.06	5.35	756.02
RW-03	04/19/95	761.37	6.91	6.85	0.06	0.80	0.05	6.86	754.51
RW-03	04/27/95	761.37	5.93	5.90	0.03	0.80	0.02	5.91	755.46
RW-03	05/05/95	761.37	5.98	5.91	0.07	0.80	0.06	5.92	755.45
RW-03	05/11/95	761.37	5.35	5.32	0.03	0.80	0.02	5.33	756.04
RW-03	05/19/95	761.37	6.12	6.04	0.08	0.80	0.06	6.06	755.31
RW-03	05/24/95	761.37	6.37	6.35	0.02	0.80	0.02	6.35	755.02
RW-03	06/01/95	761.37	6.31	6.28	0.03	0.80	0.02	6.29	755.08
RW-03	06/09/95	761.37	5.96	5.93	0.03	0.80	0.02	5.94	755.43
RW-03	06/15/95	761.37	7.08	7.03	0.05	0.80	0.04	7.04	754.33
RW-03	06/19/95	761.37	7.27	7.25	0.02	0.80	0.02	7.25	754.12
RW-03	07/03/95	761.37	6.67	6.64	0.03	0.80	0.02	6.65	754.72
RW-03	07/14/95	761.37	7.30	7.24	0.06	0.80	0.05	7.25	754.12
RW-03	07/21/95	761.37	7.28	7.19	0.09	0.80	0.07	7.21	754.16
RW-03	07/26/95	761.37	6.86	6.74	0.12	0.80	0.10	6.76	754.61
RW-03	08/07/95	761.37	6.73	6.61	0.12	0.80	0.10	6.63	754.74
RW-03	09/06/95	761.37	7.61	7.50	0.11	0.80	0.09	7.52	753.85
RW-03	10/25/95	761.37	8.72	8.28	0.44	0.80	0.35	8.37	753.00
RW-03	11/01/95	761.37	7.17	6.85	0.32	0.80	0.26	6.91	754.46
RW-03	11/10/95	761.37	8.36	7.88	0.48	0.80	0.38	7.98	753.39
RW-03	11/22/95	761.37	7.52	7.39	0.13	0.80	0.10	7.42	753.95
RW-03	12/08/95	761.37	7.00	6.68	0.32	0.80	0.26	6.74	754.63
RW-03	12/11/95	761.37	7.58	7.23	0.35	0.80	0.28	7.30	754.07
RW-03	12/29/95	761.37	8.44	8.12	0.32	0.80	0.26	8.18	753.19
RW-03	01/05/96	761.37	8.84	8.40	0.44	0.80	0.35	8.49	752.88
RW-03	01/25/96	761.37	7.30	7.25	0.05	0.80	0.04	7.26	754.11
RW-03	02/05/96	761.37	8.34	8.24	0.10	0.80	0.08	8.26	753.11
RW-03	02/13/96	761.37	6.93	6.92	0.01	0.80	NA	6.93	754.44
RW-03	02/29/96	761.37	7.18	7.14	0.04	0.80	0.03	7.15	754.22
RW-03	03/06/96	761.37	6.98	6.91	0.07	0.80	0.06	6.92	754.45
RW-03	03/12/96	761.37	7.61	7.57	0.04	0.80	0.03	7.58	753.79
RW-03	03/22/96	761.37	7.82	7.75	0.07	0.80	0.06	7.76	753.61
RW-03	03/26/96	761.37	7.74	7.67	0.07	0.80	0.06	7.68	753.69

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-03	04/30/96	761.37	5.67	5.62	0.05	0.80	0.04	5.63	755.74
RW-03	05/09/96	761.37	5.75	5.71	0.04	0.80	0.03	5.72	755.65
RW-03	05/17/96	761.37	5.55	5.50	0.05	0.80	0.04	5.51	755.86
RW-03	05/21/96	761.37	6.30	6.27	0.03	0.80	0.02	6.28	755.09
RW-03	08/29/96	761.37	7.68	7.53	0.15	0.80	0.12	7.56	753.81
RW-04	10/05/93	761.56	6.23	6.05	0.18	0.80	0.14	6.09	755.47
RW-04	10/13/93	761.56	6.55	6.42	0.13	0.80	0.10	6.45	755.11
RW-04	05/26/94	761.56	8.11	7.24	0.87	0.80	0.70	7.41	754.15
RW-04	06/01/94	761.56	8.65	7.55	1.10	0.80	0.88	7.77	753.79
RW-04	06/14/94	761.56	7.60	7.53	0.07	0.80	0.06	7.54	754.02
RW-04	07/09/94	761.56	5.80	5.50	0.30	0.80	0.24	5.56	756.00
RW-04	07/19/94	761.56	6.84	6.69	0.15	0.80	0.12	6.72	754.84
RW-04	07/25/94	761.56	6.38	6.34	0.04	0.80	0.03	6.35	755.21
RW-04	08/02/94	761.56	6.39	6.36	0.03	0.80	0.02	6.37	755.19
RW-04	08/10/94	761.56	7.46	7.41	0.05	0.80	0.04	7.42	754.14
RW-04	08/19/94	761.56	4.33	4.32	0.01	0.80	0.01	4.32	757.24
RW-04	08/24/94	761.56	5.74	5.67	0.07	0.80	0.06	5.68	755.88
RW-04	09/03/94	761.56	7.09	7.02	0.07	0.80	0.06	7.03	754.53
RW-04	09/07/94	761.56	7.33	SHEEN	---	NA	NA	7.33	754.23
RW-04	09/29/94	761.56	7.81	7.79	0.02	0.80	0.02	7.79	753.77
RW-04	10/05/94	761.56	7.12	7.06	0.06	0.80	0.05	7.07	754.49
RW-04	10/11/94	761.56	7.01	17.00	0.01	0.80	0.01	7.00	754.56
RW-04	10/20/94	761.56	7.42	7.40	0.02	0.80	0.02	7.40	754.16
RW-04	10/25/94	761.56	7.30	7.24	0.06	0.80	0.05	7.25	754.31
RW-04	11/02/94	761.56	6.67	6.65	0.02	0.80	0.02	6.65	754.91
RW-04	11/09/94	761.56	5.21	5.20	0.01	0.80	0.01	5.20	756.36
RW-04	11/21/94	761.56	6.52	6.46	0.06	0.80	0.05	6.47	755.09
RW-04	11/30/94	761.56	6.15	6.10	0.05	0.80	0.04	6.11	755.45
RW-04	12/22/94	761.56	6.22	6.11	0.11	0.80	0.09	6.13	755.43
RW-04	12/28/94	761.56	6.27	6.19	0.08	0.80	0.06	6.21	755.35
RW-04	01/04/95	761.56	6.77	6.72	0.05	0.80	0.04	6.73	754.83
RW-04	01/12/95	761.56	6.80	6.79	0.01	0.80	0.01	6.79	754.77
RW-04	01/18/95	761.56	5.93	5.88	0.05	0.80	0.04	5.89	755.67
RW-04	01/23/95	761.56	5.48	5.43	0.05	0.80	0.04	5.44	756.12
RW-04	01/31/95	761.56	6.19	6.13	0.06	0.80	0.05	6.14	755.42
RW-04	02/08/95	761.56	7.25	7.19	0.06	0.80	0.05	7.20	754.36

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-04	02/14/95	761.56	7.57	7.54	0.03	0.80	0.02	7.55	754.01
RW-04	02/21/95	761.56	6.94	6.93	0.01	0.80	0.01	6.93	754.63
RW-04	03/01/95	761.56	6.73	6.70	0.03	0.80	0.02	6.71	754.85
RW-04	03/10/95	761.56	5.57	5.54	0.03	0.80	0.02	5.55	756.01
RW-04	03/14/95	761.56	5.15	5.13	0.02	0.80	0.02	5.13	756.43
RW-04	03/23/95	761.56	6.44	6.32	0.12	0.80	0.10	6.34	755.22
RW-04	03/31/95	761.56	6.49	6.47	0.02	0.80	0.02	6.47	755.09
RW-04	04/07/95	761.56	6.83	6.79	0.04	0.80	0.03	6.80	754.76
RW-04	04/14/95	761.56	5.55	5.53	0.02	0.80	0.02	5.53	756.03
RW-04	04/19/95	761.56	6.10	6.04	0.06	0.80	0.05	6.05	755.51
RW-04	04/27/95	761.56	6.14	6.10	0.04	0.80	0.03	6.11	755.45
RW-04	05/05/95	761.56	6.20	6.13	0.07	0.80	0.06	6.14	755.42
RW-04	05/11/95	761.56	5.54	5.51	0.03	0.80	0.02	5.52	756.04
RW-04	05/19/95	761.56	6.30	6.25	0.05	0.80	0.04	6.26	755.30
RW-04	05/24/95	761.56	6.59	6.55	0.04	0.80	0.03	6.56	755.00
RW-04	06/01/95	761.56	6.51	6.48	0.03	0.80	0.02	6.49	755.07
RW-04	06/09/95	761.56	6.11	6.00	0.11	0.80	NA	6.08	755.48
RW-04	06/15/95	761.56	7.29	7.22	0.07	0.80	0.06	7.23	754.33
RW-04	06/19/95	761.56	7.48	7.44	0.04	0.80	0.03	7.45	754.11
RW-04	07/03/95	761.56	6.90	6.84	0.06	0.80	0.05	6.85	754.71
RW-04	07/14/95	761.56	7.57	7.43	0.14	0.80	0.11	7.46	754.10
RW-04	07/21/95	761.56	7.59	7.38	0.21	0.80	0.17	7.42	754.14
RW-04	07/26/95	761.56	7.09	6.94	0.15	0.80	0.12	6.97	754.59
RW-04	08/07/95	761.56	6.97	6.79	0.18	0.80	0.14	6.83	754.73
RW-04	09/06/95	761.56	7.91	7.64	0.27	0.80	0.22	7.69	753.87
RW-04	10/25/95	761.56	8.93	8.44	0.49	0.80	0.39	8.54	753.02
RW-04	11/01/95	761.56	7.38	7.00	0.38	0.80	0.30	7.08	754.48
RW-04	11/10/95	761.56	8.52	8.05	0.47	0.80	0.38	8.14	753.42
RW-04	11/22/95	761.56	7.77	7.42	0.35	0.80	0.28	7.49	754.07
RW-04	12/08/95	761.56	7.38	6.85	0.53	0.80	0.42	6.96	754.60
RW-04	12/11/95	761.56	7.90	7.40	0.50	0.80	0.40	7.50	754.06
RW-04	12/29/95	761.56	8.60	8.33	0.27	0.80	0.22	8.38	753.18
RW-04	01/05/96	761.56	9.23	8.64	0.59	0.80	0.47	8.76	752.80
RW-04	01/25/96	761.56	7.42	7.38	0.04	0.80	0.03	7.39	754.17
RW-04	02/05/96	761.56	8.59	8.45	0.14	0.80	0.11	8.48	753.08
RW-04	02/13/96	761.56	7.15	7.07	0.08	0.80	0.06	7.09	754.47
RW-04	02/29/96	761.56	7.34	7.30	0.04	0.80	0.03	7.31	754.25

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-04	03/06/96	761.56	7.16	7.11	0.05	0.80	0.04	7.12	754.44
RW-04	03/12/96	761.56	7.82	7.77	0.05	0.80	0.04	7.78	753.78
RW-04	03/22/96	761.56	8.02	7.97	0.05	0.80	0.04	7.98	753.58
RW-04	03/26/96	761.56	7.90	7.85	0.05	0.80	0.04	7.86	753.70
RW-04	04/30/96	761.56	5.91	5.83	0.08	0.80	0.06	5.85	755.71
RW-04	05/09/96	761.56	5.89	5.82	0.07	0.80	0.06	5.83	755.73
RW-04	05/17/96	761.56	5.79	5.78	0.01	0.80	0.01	5.78	755.78
RW-04	05/21/96	761.56	6.47	---	NA	NA	6.47	755.09	
RW-04	08/29/96	761.56	8.04	7.68	0.36	0.80	0.29	7.75	753.81
RW-05	10/05/93	761.13	5.76	5.58	0.18	0.80	0.14	5.62	755.51
RW-05	10/13/93	761.13	6.18	6.14	0.04	0.80	0.03	6.15	754.98
RW-05	05/02/94	761.13	5.82	5.50	0.32	0.80	0.26	5.56	755.57
RW-05	05/10/94	761.13	6.58	6.55	0.03	0.80	0.02	6.56	754.57
RW-05	05/26/94	761.13	7.86	6.95	0.91	0.80	0.73	7.13	754.00
RW-05	06/01/94	761.13	7.85	7.62	0.23	0.80	0.18	7.67	753.46
RW-05	06/14/94	761.13	7.02	6.96	0.06	0.80	0.05	6.97	754.16
RW-05	07/09/94	761.13	5.35	5.25	0.10	0.80	0.08	5.27	755.86
RW-05	07/19/94	761.13	6.55	6.39	0.16	0.80	0.13	6.42	754.71
RW-05	07/25/94	761.13	6.06	6.02	0.04	0.80	0.03	6.03	755.10
RW-05	08/02/94	761.13	6.07	6.04	0.03	0.80	0.02	6.05	755.08
RW-05	08/10/94	761.13	6.89	6.88	0.01	0.80	0.01	6.88	754.25
RW-05	08/19/94	761.13	4.04	---	NA	NA	4.04	757.09	
RW-05	08/24/94	761.13	5.47	5.40	0.07	0.80	0.06	5.41	755.72
RW-05	09/03/94	761.13	6.51	6.50	0.01	0.80	0.01	6.50	754.63
RW-05	09/07/94	761.13	6.90	SHEEN	---	NA	NA	6.90	754.23
RW-05	09/29/94	761.13	7.50	---	NA	NA	7.50	753.6	
RW-05	10/05/94	761.13	6.65	6.64	0.01	0.80	0.01	6.64	754.49
RW-05	10/11/94	761.13	6.57	6.56	0.01	0.80	0.01	6.56	754.57
RW-05	10/20/94	761.13	7.95	7.92	0.03	0.80	0.02	7.93	753.20
RW-05	10/25/94	761.13	7.07	7.05	0.02	0.80	0.02	7.05	754.08
RW-05	11/02/94	761.13	6.32	6.31	0.01	0.80	0.01	6.31	754.82
RW-05	11/09/94	761.13	4.90	4.88	0.02	0.80	0.02	4.88	756.25
RW-05	11/21/94	761.13	6.15	6.14	0.01	0.80	0.01	6.14	754.99
RW-05	11/30/94	761.13	5.64	5.62	0.02	0.80	0.02	5.62	755.51
RW-05	12/22/94	761.13	5.90	5.88	0.02	0.80	0.02	5.88	755.25
RW-05	12/28/94	761.13	5.92	5.89	0.03	0.80	0.02	5.90	755.23

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
RW-05	01/04/95	761.13	6.45	6.40	0.05	0.80	0.04	6.41	754.72
RW-05	01/12/95	761.13	6.51	6.50	0.01	0.80	0.01	6.50	754.63
RW-05	01/18/95	761.13	5.41	5.36	0.05	0.80	0.04	5.37	755.76
RW-05	01/23/95	761.13	5.08	4.49	0.59	0.80	0.47	4.61	756.52
RW-05	01/31/95	761.13	5.75	5.62	0.13	0.80	0.10	5.65	755.48
RW-05	02/08/95	761.13	7.21	6.67	0.54	0.80	0.43	6.78	754.35
RW-05	02/14/95	761.13	7.08	7.02	0.06	0.80	0.05	7.07	754.06
RW-05	02/21/95	761.13	6.40	6.39	0.01	0.80	0.01	6.39	754.74
RW-05	03/01/95	761.13	6.23	6.21	0.02	0.80	0.02	6.21	754.92
RW-05	03/10/95	761.13	5.03	5.00	0.03	0.80	0.02	5.01	756.12
RW-05	03/14/95	761.13	4.64	4.62	0.02	0.80	0.02	4.62	756.51
RW-05	03/23/95	761.13	5.84	5.81	0.03	0.80	0.02	5.82	755.31
RW-05	03/31/95	761.13	5.98	5.95	0.03	0.80	0.02	5.96	755.17
RW-05	04/07/95	761.13	6.47	6.33	0.14	0.80	0.11	6.36	754.77
RW-05	04/14/95	761.13	5.04	5.02	0.02	0.80	0.02	5.02	756.11
RW-05	04/19/95	761.13	5.61	5.55	0.06	0.80	0.05	5.56	755.57
RW-05	04/27/95	761.13	5.63	5.59	0.04	0.80	0.03	5.60	755.53
RW-05	05/05/95	761.13	5.66	5.62	0.04	0.80	0.03	5.63	755.50
RW-05	05/11/95	761.13	5.00	5.00	---	0.80	NA	5.00	756.13
RW-05	05/19/95	761.13	5.80	5.75	0.05	0.80	0.04	5.76	755.37
RW-05	05/24/95	761.13	6.11	6.05	0.06	0.80	0.05	6.06	755.07
RW-05	06/01/95	761.13	6.06	6.01	0.05	0.80	0.04	6.02	755.11
RW-05	06/09/95	761.13	5.94	5.88	0.06	0.80	0.05	5.89	755.24
RW-05	06/15/95	761.13	7.77	7.72	0.05	0.80	0.04	7.73	753.40
RW-05	06/19/95	761.13	7.03	6.94	0.09	0.80	0.07	6.96	754.17
RW-05	07/03/95	761.13	6.40	6.32	0.08	0.80	0.06	6.34	754.79
RW-05	07/14/95	761.13	7.10	6.91	0.19	0.80	0.15	6.95	754.18
RW-05	07/21/95	761.13	7.12	6.98	0.14	0.80	0.11	7.01	754.12
RW-05	07/26/95	761.13	6.71	6.44	0.27	0.80	0.22	6.49	754.64
RW-05	08/07/95	761.13	6.42	6.25	0.17	0.80	0.14	6.28	754.85
RW-05	09/06/95	761.13	7.61	7.23	0.38	0.80	0.30	7.31	753.82
RW-05	10/25/95	761.13	8.49	7.57	0.92	0.80	0.74	7.75	753.38
RW-05	11/01/95	761.13	6.83	6.51	0.32	0.80	0.26	6.57	754.56
RW-05	11/10/95	761.13	8.04	7.53	0.51	0.80	0.41	7.63	753.50
RW-05	11/22/95	761.13	7.28	6.91	0.37	0.80	0.30	6.98	754.15
RW-05	12/08/95	761.13	6.62	6.35	0.27	0.80	0.22	6.40	754.73
RW-05	12/11/95	761.13	7.54	6.94	0.60	0.80	0.48	7.06	754.07

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV
RW-05	12/29/95	761.13	8.04	7.88	0.16	0.80	0.13	7.91	753.22
RW-05	01/05/96	761.13	8.81	8.14	0.67	0.80	0.54	8.27	752.86
RW-05	01/25/96	761.13	6.89	6.84	0.05	0.80	0.04	6.85	754.28
RW-05	02/05/96	761.13	9.13	9.11	0.02	0.80	0.02	9.11	752.02
RW-05	02/13/96	761.13	6.74	6.65	0.09	0.80	0.07	6.67	754.46
RW-05	02/29/96	761.13	6.88	6.81	0.07	0.80	0.06	6.82	754.31
RW-05	03/06/96	761.13	7.02	6.62	0.40	0.80	0.32	6.70	754.43
RW-05	03/12/96	761.13	7.21	7.04	0.17	0.80	0.14	7.07	754.06
RW-05	03/22/96	761.13	7.67	7.58	0.09	0.80	0.07	7.60	753.53
RW-05	03/26/96	761.13	7.57	7.46	0.11	0.80	0.09	7.48	753.65
RW-05	04/30/96	761.13	5.40	5.33	0.07	0.80	0.06	5.34	755.79
RW-05	05/09/96	761.13	5.46	5.41	0.05	0.80	0.04	5.42	755.71
RW-05	05/17/96	761.13	6.47	6.46	0.01	0.80	0.01	6.46	754.67
RW-05	05/21/96	761.13	6.32	6.31	0.01	0.80	0.01	6.31	754.82
RW-05	08/29/96	761.13	7.58	7.22	0.36	0.80	0.29	7.29	753.84
S-01	04/26/89	766.71	10.97	10.95	0.02	0.80	0.02	10.95	755.76
S-01	12/05/89	766.71	11.05	---	---	NA	NA	11.05	755.66
S-01	01/30/90	766.71	10.96	---	---	NA	NA	10.96	755.75
S-01	10/17/90	766.71	9.09	9.05	0.04	0.80	0.03	9.06	757.65
S-01	10/20/92	766.71	10.45	---	---	NA	NA	10.45	756.26
S-01	11/13/92	766.71	9.17	---	---	NA	NA	9.17	757.54
S-01	12/21/92	766.71	10.15	---	---	NA	NA	10.15	756.56
S-01	04/05/93	766.71	8.25	---	---	NA	NA	8.25	758.46
S-01	07/18/94	766.71	10.86	---	---	NA	NA	10.86	755.85
S-01	09/29/94	766.71	12.08	---	---	NA	NA	12.08	754.63
S-01	01/31/95	766.71	9.61	---	---	NA	NA	9.61	757.10
S-01	04/14/95	766.71	10.08	---	---	NA	NA	10.08	756.63
S-01	08/07/95	766.71	11.68	---	---	NA	NA	11.68	755.03
S-01	02/13/96	766.71	11.15	---	---	NA	NA	11.15	755.56
S-02	04/26/89	767.75	11.43	11.42	0.01	0.80	0.01	11.42	756.33
S-02	12/05/89	767.75	11.63	11.61	0.02	0.80	0.02	11.61	756.14
S-02	01/30/90	767.75	11.45	11.41	0.04	0.80	0.03	11.42	756.33
S-02	10/17/90	767.75	9.56	9.50	0.06	0.80	0.05	9.51	758.24
S-02	10/20/92	767.75	10.07	10.04	0.03	0.80	0.02	10.05	757.70
S-02	11/13/92	767.75	8.86 SHEEN	---	---	NA	NA	8.86	758.89

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Depths and Thicknesses reported in feet.

Location: Kalamazoo, Michigan

NM = Not Measured

Well ID	DATE GAUGED M / D / Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV
S-02	12/21/92	767.75	9.98 SHEEN	---	NA	NA	9.98	757.77	
S-02	04/05/93	767.75	6.02	---	NA	NA	6.02	761.73	
S-02	07/18/94	767.75	11.36	---	NA	NA	11.36	756.39	
S-02	09/29/94	767.75	12.62	---	NA	NA	12.62	755.13	
S-02	01/31/95	767.75	10.63	---	NA	NA	10.63	757.12	
S-02	04/14/95	767.75	10.53	---	NA	NA	10.53	757.22	
S-02	08/07/95	767.75	12.17	12.15	0.02	0.80	0.02	12.15	755.60
S-03	12/05/89	764.01	8.96	---	NA	NA	8.96	755.05	
S-03	01/31/90	764.01	8.32	---	NA	NA	8.32	755.69	
S-03	10/20/92	764.01	7.98 SHEEN	---	NA	NA	7.98	756.03	
S-03	11/13/92	764.01	7.64	7.62	0.02	0.80	0.02	7.62	756.39
S-03	12/21/92	764.01	8.01	8.00	0.01	0.80	0.01	8.00	756.01
S-03	04/05/93	764.01	6.30	---	NA	NA	6.30	757.71	
S-03	07/18/94	764.01	8.82	---	NA	NA	8.82	755.19	
S-03	09/29/94	764.01	10.02	10.00	0.02	0.80	0.02	10.00	754.01
S-03	01/31/95	764.01	8.32	---	NA	NA	8.32	755.69	
S-03	04/14/95	764.01	7.84	---	NA	NA	7.84	756.17	
S-03	08/07/95	764.01	9.35	9.32	0.03	0.80	0.02	9.33	754.68
S-03	02/13/96	764.01	9.46	9.45	0.01	0.80	0.01	9.45	754.56
S-04	01/31/90	762.99	7.39	7.35	0.04	0.80	0.03	7.36	755.63
S-04	10/17/90	762.99	6.12	6.10	0.02	0.80	0.02	6.10	756.89
S-04	10/20/92	762.99	5.53	5.45	0.08	0.80	0.06	5.47	757.52
S-04	11/13/92	762.99	5.79	5.59	0.20	0.80	0.16	5.63	757.36
S-04	12/21/92	762.99	6.14	6.00	0.14	0.80	0.11	6.03	756.96
S-04	04/05/93	762.99	4.98	4.85	0.13	0.80	0.10	4.88	758.11
S-04	07/18/94	762.99	6.94	6.90	0.04	0.80	0.03	6.91	756.08
S-04	09/29/94	762.99	7.54	---	NA	NA	7.54	755.45	
S-04	10/05/94	762.99	7.78	7.75	0.03	0.80	0.02	7.76	755.23
S-04	10/20/94	762.99	8.06	7.98	0.08	0.80	0.06	8.00	754.99
S-04	10/25/94	762.99	8.04	8.02	0.02	0.80	0.02	8.02	754.97
S-04	11/02/94	762.99	7.34	7.33	0.01	0.80	0.01	7.33	755.66
S-04	11/09/94	762.99	5.85	---	NA	NA	5.85	757.14	
S-04	11/30/94	762.99	7.87	7.85	0.02	0.80	0.02	7.85	755.14
S-04	12/22/94	762.99	6.81	6.77	0.04	0.80	0.03	6.78	756.21
S-04	12/28/94	762.99	6.77	6.72	0.05	0.80	0.04	6.73	756.26

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
S-04	01/04/95	762.99	7.25	7.22	0.03	0.80	0.02	7.23	755.76
S-04	01/12/95	762.99	6.63	6.60	0.03	0.80	0.02	6.61	756.38
S-04	01/18/95	762.99	6.89	6.71	0.18	0.80	0.14	6.75	756.24
S-04	01/23/95	762.99	6.52	6.28	0.24	0.80	0.19	6.33	756.66
S-04	01/31/95	762.99	6.85	6.68	0.17	0.80	NA	6.68	756.31
S-04	02/08/95	762.99	7.78	7.68	0.10	0.80	0.08	7.70	755.29
S-04	03/01/95	762.99	7.84	7.58	0.26	0.80	0.21	7.63	755.36
S-04	03/10/95	762.99	6.48	6.33	0.15	0.80	0.12	6.36	756.63
S-04	03/14/95	762.99	6.13	5.91	0.22	0.80	0.18	5.95	757.04
S-04	03/23/95	762.99	7.29	7.09	0.20	0.80	0.16	7.13	755.86
S-04	03/31/95	762.99	7.52	7.29	0.23	0.80	0.18	7.34	755.65
S-04	04/07/95	762.99	7.83	7.69	0.14	0.80	0.11	7.72	755.27
S-04	04/14/95	762.99	6.51	6.39	0.12	0.80	0.10	6.41	756.58
S-04	04/19/95	762.99	7.02	6.88	0.14	0.80	0.11	6.91	756.08
S-04	04/27/95	762.99	7.16	6.99	0.17	0.80	0.14	7.02	755.97
S-04	05/05/95	762.99	7.08	6.93	0.15	0.80	0.12	6.96	756.03
S-04	05/11/95	762.99	6.56	6.39	0.17	0.80	0.14	6.42	756.57
S-04	05/19/95	762.99	6.81	6.73	0.08	0.80	0.06	6.75	756.24
S-04	05/24/95	762.99	7.64	7.49	0.15	0.80	0.12	7.52	755.47
S-04	06/01/95	762.99	7.55	7.35	0.20	0.80	0.16	7.39	755.60
S-04	06/09/95	762.99	7.51	7.24	0.27	0.80	0.22	7.29	755.70
S-04	06/15/95	762.99	7.98	7.80	0.18	0.80	0.14	7.84	755.15
S-04	06/19/95	762.99	8.19	8.10	0.09	0.80	0.07	8.12	754.87
S-04	07/03/95	762.99	7.52	7.40	0.12	0.80	0.10	7.42	755.57
S-04	07/14/95	762.99	8.12	8.00	0.12	0.80	0.10	8.02	754.97
S-04	07/21/95	762.99	7.98	7.96	0.02	0.80	0.02	7.96	755.03
S-04	07/26/95	762.99	7.58	7.56	0.02	0.80	0.02	7.56	755.43
S-04	08/07/95	762.99	7.53	7.51	0.02	0.80	NA	7.52	755.47
S-04	08/29/95	762.99	8.32	8.30	0.02	0.80	0.02	8.30	754.69
S-04	09/06/95	762.99	8.31	8.29	0.02	0.80	0.02	8.29	754.70
S-04	10/25/95	762.99	9.21	9.20	0.01	0.80	0.01	9.20	753.79
S-04	11/10/95	762.99	8.70	8.69	0.01	0.80	0.01	8.69	754.30
S-04	11/22/95	762.99	8.05	---	---	NA	NA	8.05	754.94
S-04	02/13/96	762.99	7.82	7.81	0.01	0.80	0.01	7.81	755.18
S-04	02/20/96	762.99	8.17	8.16	0.01	0.80	0.01	8.16	754.83
S-04	02/29/96	762.99	8.68	8.15	0.53	0.80	0.42	8.26	754.73
S-04	03/06/96	762.99	8.14	7.90	0.24	0.80	0.19	7.95	755.04

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
S-04	03/12/96	762.99	8.92	8.67	0.25	0.80	0.20	8.72	754.27
S-04	03/22/96	762.99	9.00	8.80	0.20	0.80	0.16	8.84	754.15
S-04	03/26/96	762.99	8.83	8.77	0.06	0.80	0.05	8.78	754.21
S-04	04/30/96	762.99	6.54	6.51	0.03	0.80	0.02	6.52	756.47
S-04	05/17/96	762.99	6.41	6.40	0.01	0.80	0.01	6.40	756.59
S-04	05/21/96	762.99	7.04	7.00	0.04	0.80	0.03	7.01	755.98
S-05	04/26/89	762.55	7.45	7.44	0.01	0.80	0.01	7.44	755.11
S-05	12/05/89	762.55	7.70	7.63	0.07	0.80	0.06	7.64	754.91
S-05	01/31/90	762.55	7.10	6.97	0.13	0.80	0.10	7.00	755.55
S-05	10/17/90	762.55	5.92	5.64	0.28	0.80	0.22	5.70	756.85
S-05	10/20/92	762.55	6.76	6.48	0.28	0.80	0.22	6.54	756.01
S-05	11/13/92	762.55	6.33	6.09	0.24	0.80	0.19	6.14	756.41
S-05	12/21/92	762.55	6.72	6.53	0.19	0.80	0.15	6.57	755.98
S-05	01/07/93	762.55	4.05	3.75	0.30	0.80	0.24	3.81	758.74
S-05	04/05/93	762.55	4.96	4.83	0.13	0.80	0.10	4.86	757.69
S-05	07/18/94	762.55	7.72	7.60	0.12	0.80	0.10	7.62	754.93
S-05	09/29/94	762.55	8.45	---	NA	NA	8.45	754.10	
S-05	10/20/94	762.55	8.48	8.36	0.12	0.80	0.10	8.38	754.17
S-05	10/25/94	762.55	8.43	8.28	0.15	0.80	0.12	8.31	754.24
S-05	11/02/94	762.55	7.73	7.48	0.25	0.80	0.20	7.53	755.02
S-05	11/09/94	762.55	6.13	6.00	0.13	0.80	0.10	6.03	756.52
S-05	11/30/94	762.55	7.25	7.01	0.24	0.80	0.19	7.06	755.49
S-05	12/22/94	762.55	7.22	7.01	0.21	0.80	0.17	7.05	755.50
S-05	12/28/94	762.55	7.22	7.05	0.17	0.80	0.14	7.08	755.47
S-05	01/04/95	762.55	7.65	7.54	0.11	0.80	0.09	7.56	754.99
S-05	01/12/95	762.55	7.85	7.67	0.18	0.80	0.14	7.71	754.84
S-05	01/18/95	762.55	6.60	6.53	0.07	0.80	0.06	6.54	756.01
S-05	01/23/95	762.55	6.23	6.15	0.08	0.80	0.06	6.17	756.38
S-05	01/31/95	762.55	7.15	6.98	0.17	0.80	0.14	7.01	755.54
S-05	02/08/95	762.55	8.12	7.98	0.14	0.80	0.11	8.01	754.54
S-05	02/14/95	762.55	6.38	6.25	0.13	0.80	0.10	6.28	756.27
S-05	03/01/95	762.55	7.48	7.34	0.14	0.80	0.11	7.37	755.18
S-05	03/10/95	762.55	6.38	6.32	0.06	0.80	0.05	6.33	756.22
S-05	03/14/95	762.55	5.91	5.77	0.14	0.80	0.11	5.80	756.75
S-05	03/23/95	762.55	6.75	6.62	0.13	0.80	0.10	6.65	755.90
S-05	03/31/95	762.55	7.13	7.00	0.13	0.80	0.10	7.03	755.52

FLUOR DANIEL GTI
CHRONOLOGICAL GAUGING DATA

Site: Conrail Botsford

Location: Kalamazoo, Michigan

Depths and Thicknesses reported in feet.

NM = Not Measured

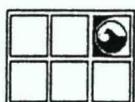
Well ID	DATE GAUGED M/D/Y	T.O.C. ELEV.	DEPTH to WATER	DEPTH to PETRO	PETRO. THICK	PETRO GRAV	WATER EQUIV	CORR. DTW	CORR. WATER ELEV.
S-05	04/07/95	762.55	7.59	7.40	0.19	0.80	0.15	7.44	755.11
S-05	04/14/95	762.55	6.28	6.20	0.08	0.80	0.06	6.22	756.33
S-05	04/19/95	762.55	6.75	6.60	0.15	0.80	0.12	6.63	755.92
S-05	04/27/95	762.55	6.82	6.71	0.11	0.80	0.09	6.73	755.82
S-05	05/05/95	762.55	6.81	6.68	0.13	0.80	0.10	6.71	755.84
S-05	05/11/95	762.55	6.32	6.21	0.11	0.80	0.09	6.23	756.32
S-05	05/19/95	762.55	7.23	7.10	0.13	0.80	0.10	7.13	755.42
S-05	05/24/95	762.55	7.30	7.17	0.13	0.80	0.10	7.20	755.35
S-05	06/01/95	762.55	7.33	7.18	0.15	0.80	0.12	7.21	755.34
S-05	06/09/95	762.55	7.28	7.06	0.22	0.80	0.18	7.10	755.45
S-05	06/15/95	762.55	8.39	8.12	0.27	0.80	0.22	8.17	754.38
S-05	06/19/95	762.55	8.50	8.44	0.06	0.80	0.05	8.45	754.10
S-05	07/03/95	762.55	8.00	7.72	0.28	0.80	0.22	7.78	754.77
S-05	07/14/95	762.55	8.50	8.33	0.17	0.80	0.14	8.36	754.19
S-05	07/21/95	762.55	8.38	8.28	0.10	0.80	0.08	8.30	754.25
S-05	07/26/95	762.55	8.16	7.81	0.35	0.80	0.28	7.88	754.67
S-05	08/07/95	762.55	8.11	7.72	0.39	0.80	0.31	7.80	754.75
S-05	10/25/95	762.55	12.45	--		NA	NA	12.45	750.10
S-05	11/10/95	762.55	9.28	8.94	0.34	0.80	0.27	9.01	753.54
S-05	11/22/95	762.55	8.57	8.34	0.23	0.80	0.18	8.39	754.16
S-05	12/11/95	762.55	8.04	8.03	0.01	0.80	0.01	8.03	754.52
S-05	12/29/95	762.55	8.04	7.88	0.16	0.80	0.13	7.91	754.64
S-05	01/05/96	762.55	8.36	8.32	0.04	0.80	0.03	8.33	754.22
S-05	01/25/96	762.55	8.03	7.98	0.05	0.80	0.04	7.99	754.56
S-05	02/13/96	762.55	8.14	7.86	0.28	0.80	0.22	7.92	754.63
S-05	02/20/96	762.55	8.48	8.35	0.13	0.80	0.10	8.38	754.17
S-05	02/29/96	762.55	8.16	8.14	0.02	0.80	0.02	8.14	754.41
S-05	03/06/96	762.55	7.67	7.65	0.02	0.80	0.02	7.65	754.90
S-05	03/12/96	762.55	8.49	8.45	0.04	0.80	0.03	8.46	754.09
S-05	03/22/96	762.55	8.57	8.55	0.02	0.80	0.02	8.55	754.00
S-05	03/26/96	762.55	8.54	8.53	0.01	0.80	0.01	8.53	754.02
SEWER	10/20/92	765.04	8.82	8.78	0.04	0.80	0.03	8.79	756.25
SEWER	11/13/92	765.04	9.09	8.78	0.31	0.80	0.25	8.84	756.20
SEWER	12/21/92	765.04	9.78	9.35	0.43	0.80	0.34	9.44	755.60



FLUOR DANIEL GTI

APPENDIX D

DRILLING LOGS

GROUNDWATER
TECHNOLOGY

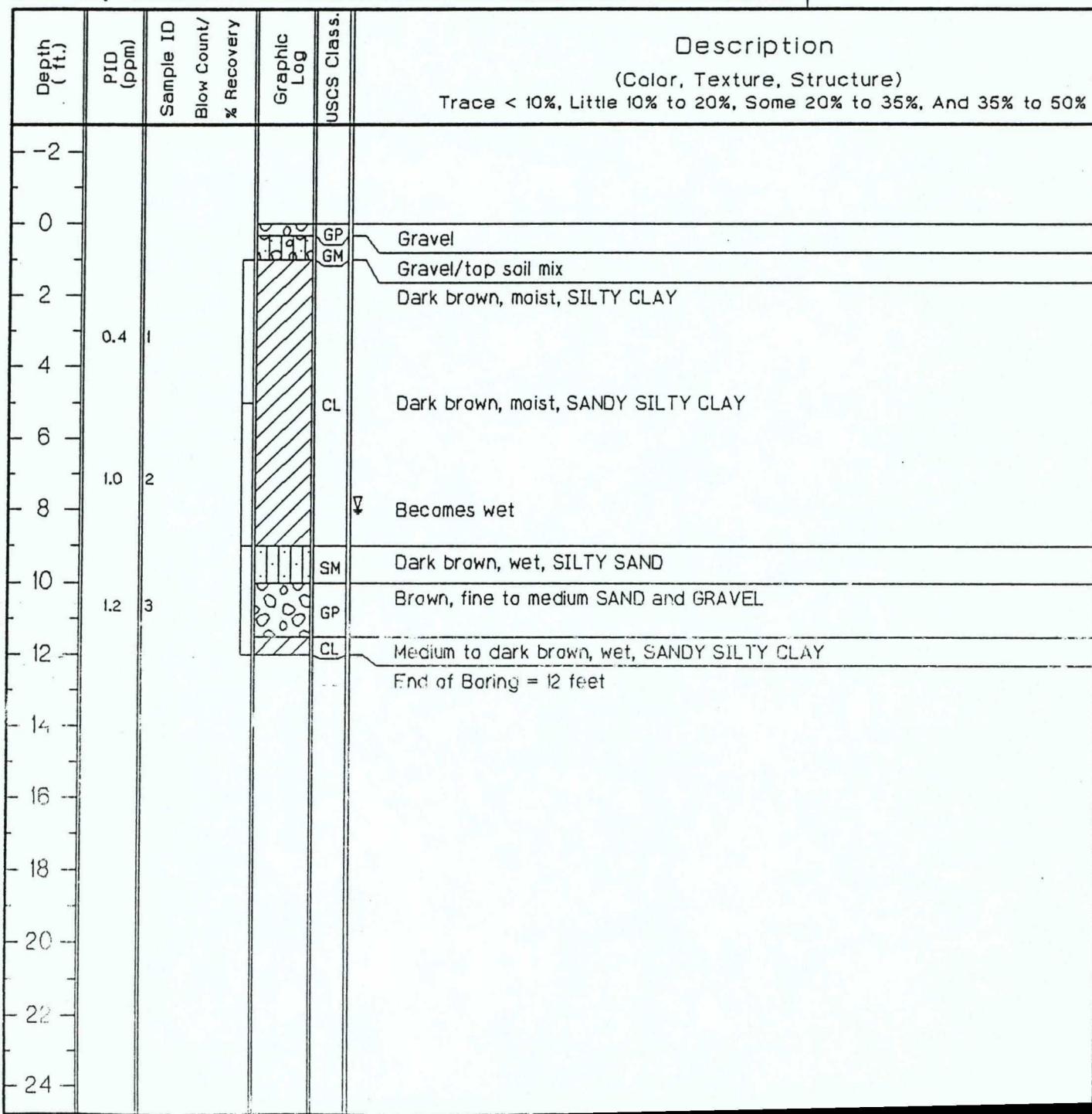
Drilling Log

Soil Boring GP-1

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 8 ft. Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/11/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.



GROUNDWATER
TECHNOLOGY

Drilling Log

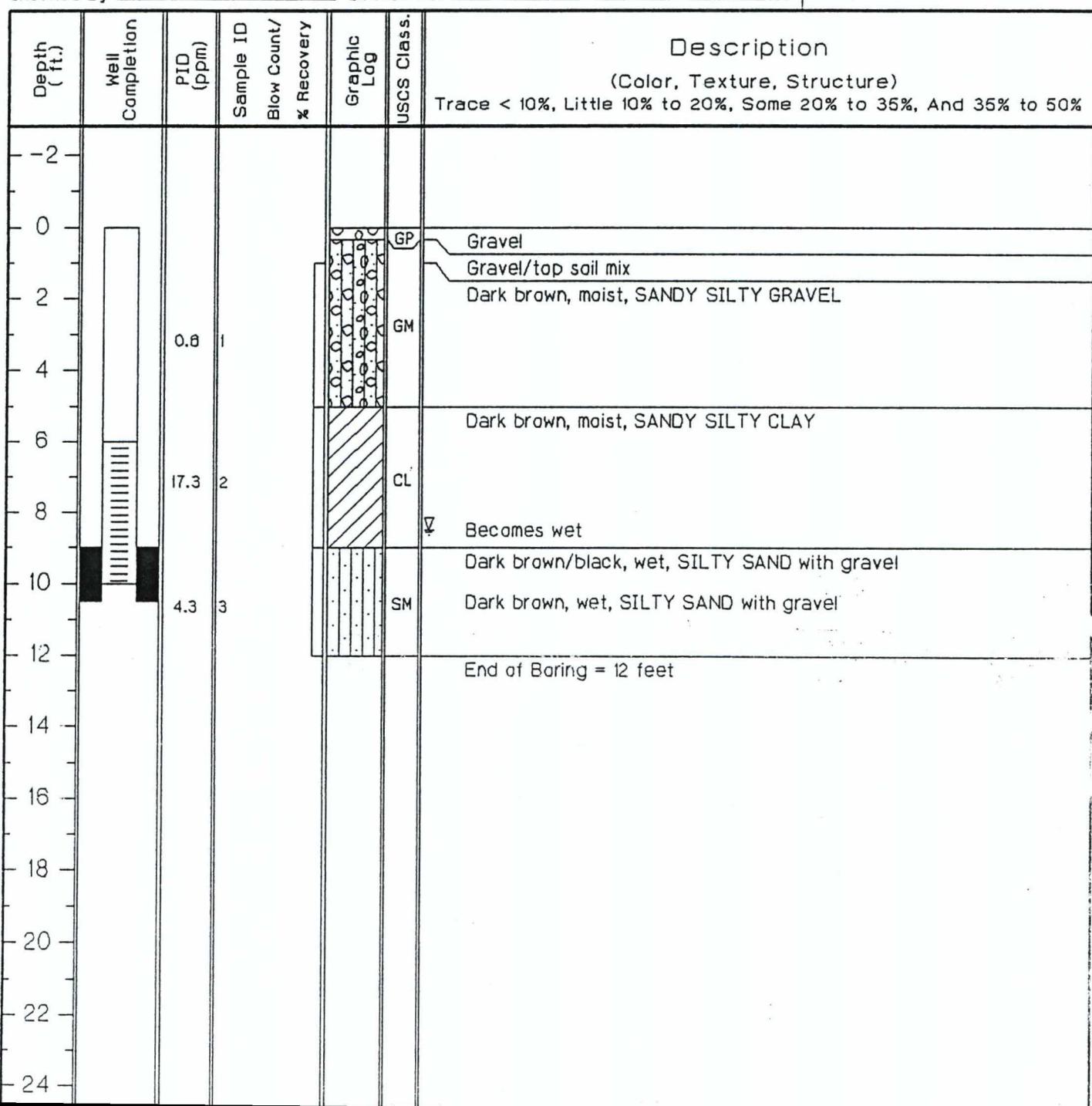
Monitoring Well GP-2

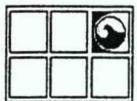
Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 8.5 ft. Static _____
Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
Casing: Dia 2 in. Length 6 ft. Type Steel
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/11/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.



GROUNDWATER
TECHNOLOGY

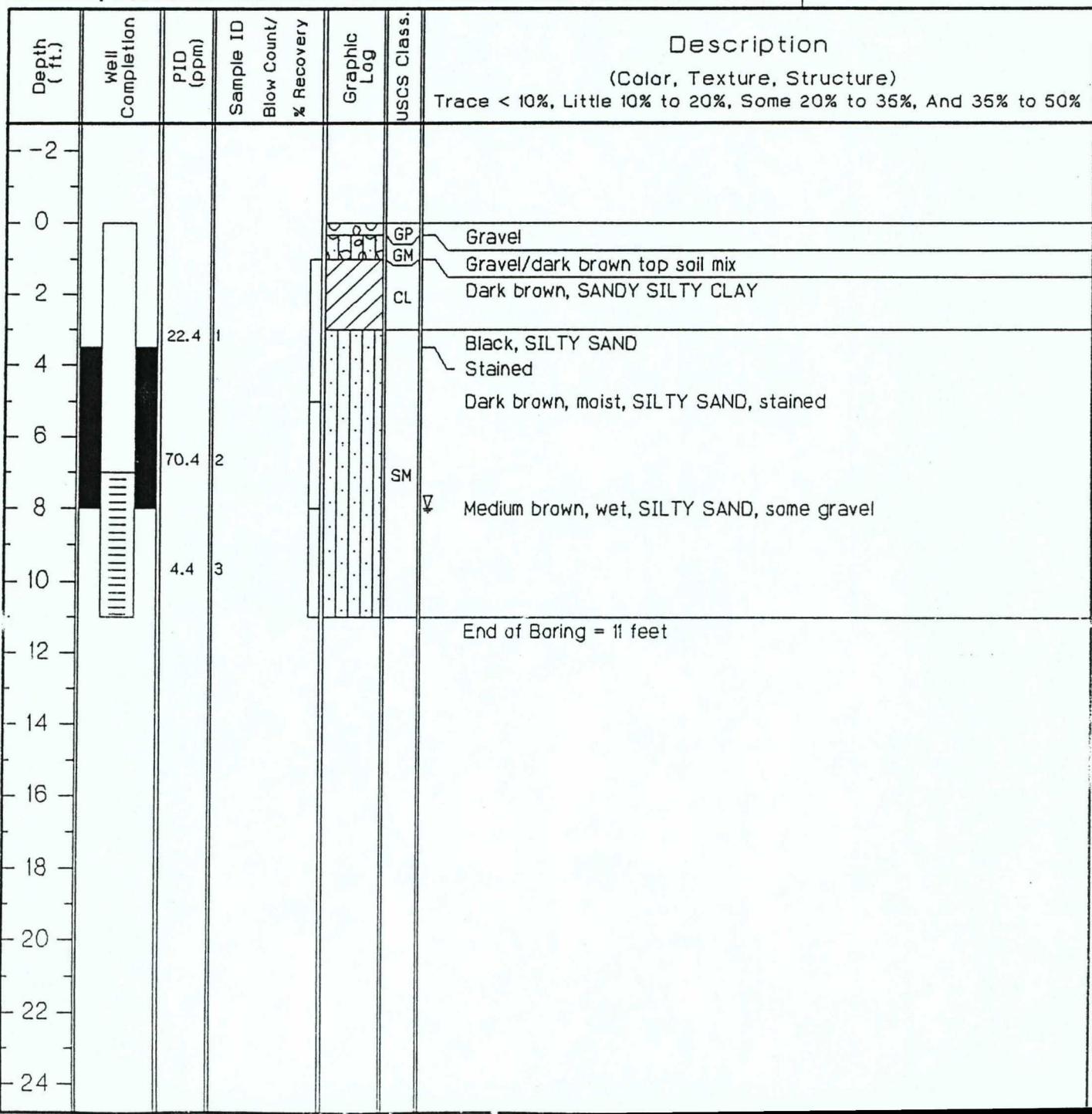
Drilling Log

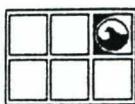
Monitoring Well GP-3

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 11 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 8 ft. Static _____
Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
Casing: Dia 2 in. Length 7 ft. Type Steel
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/11/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.



GROUNDWATER
TECHNOLOGY

Drilling Log

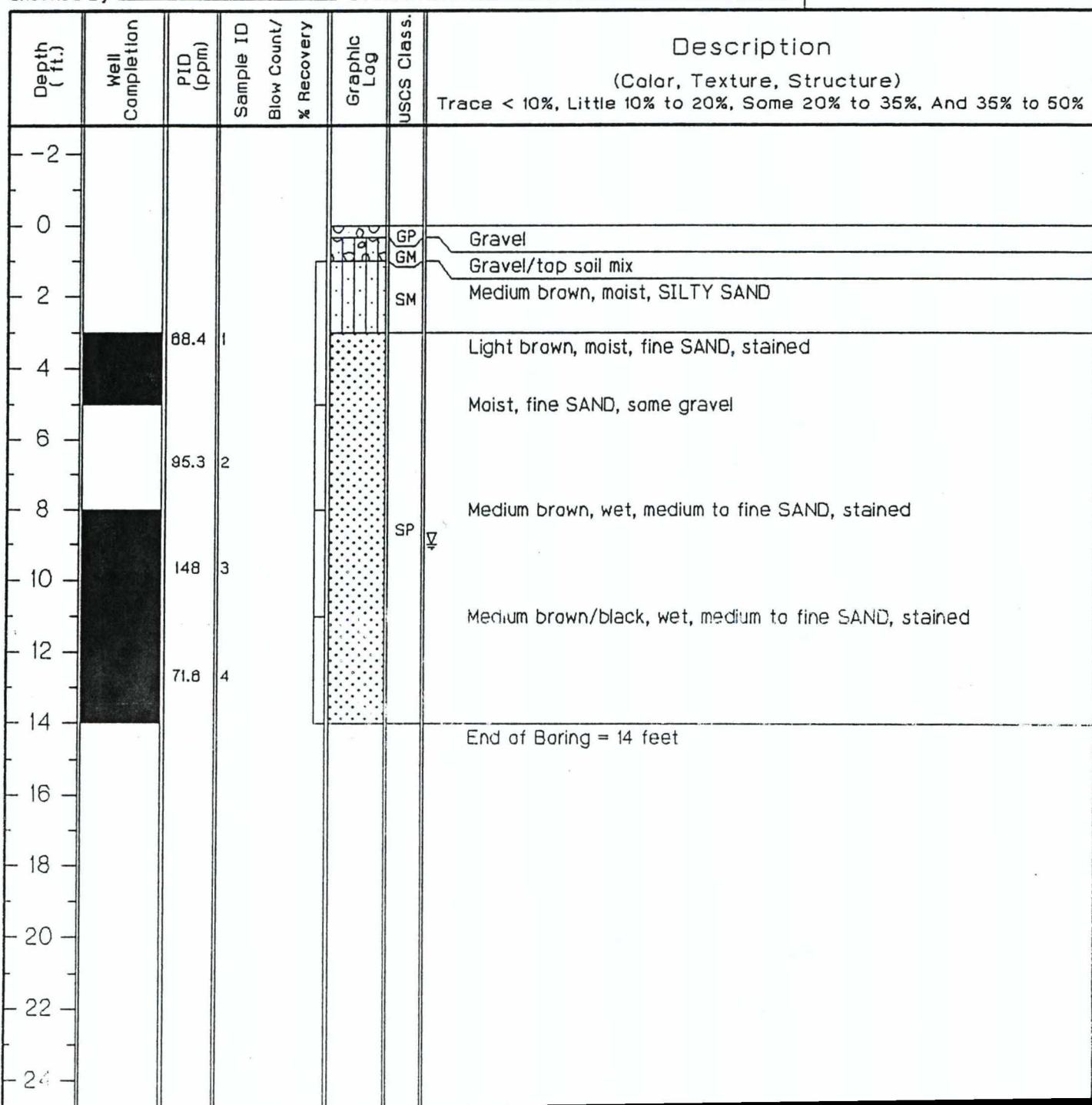
Monitoring Well GP-4

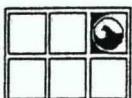
Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 14 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 9 ft. Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/11/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.



GROUNDWATER
TECHNOLOGY

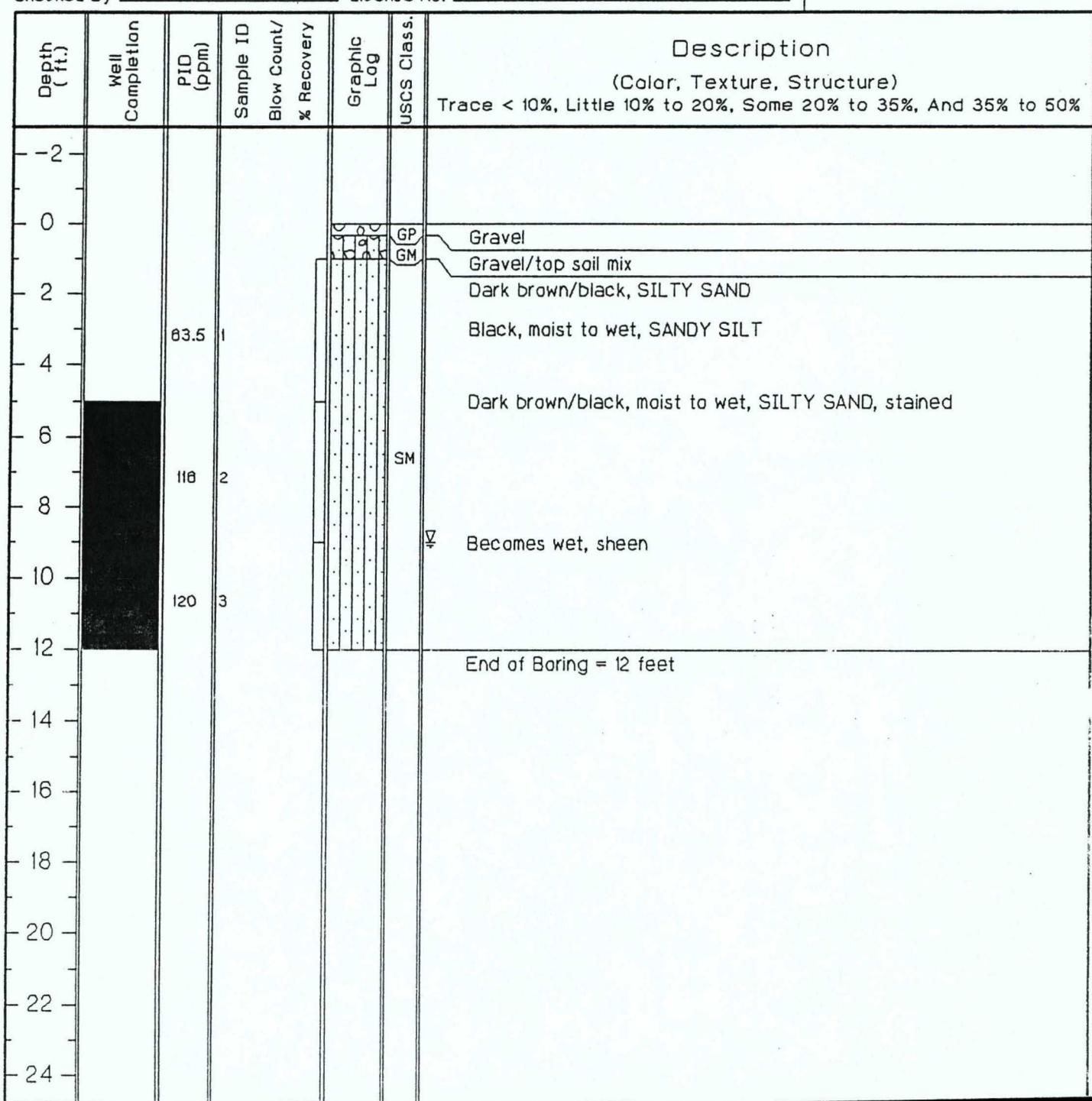
Drilling Log

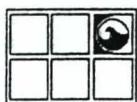
Monitoring Well GP-5

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 9 ft. Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/11/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.

GROUNDWATER
TECHNOLOGY

Drilling Log

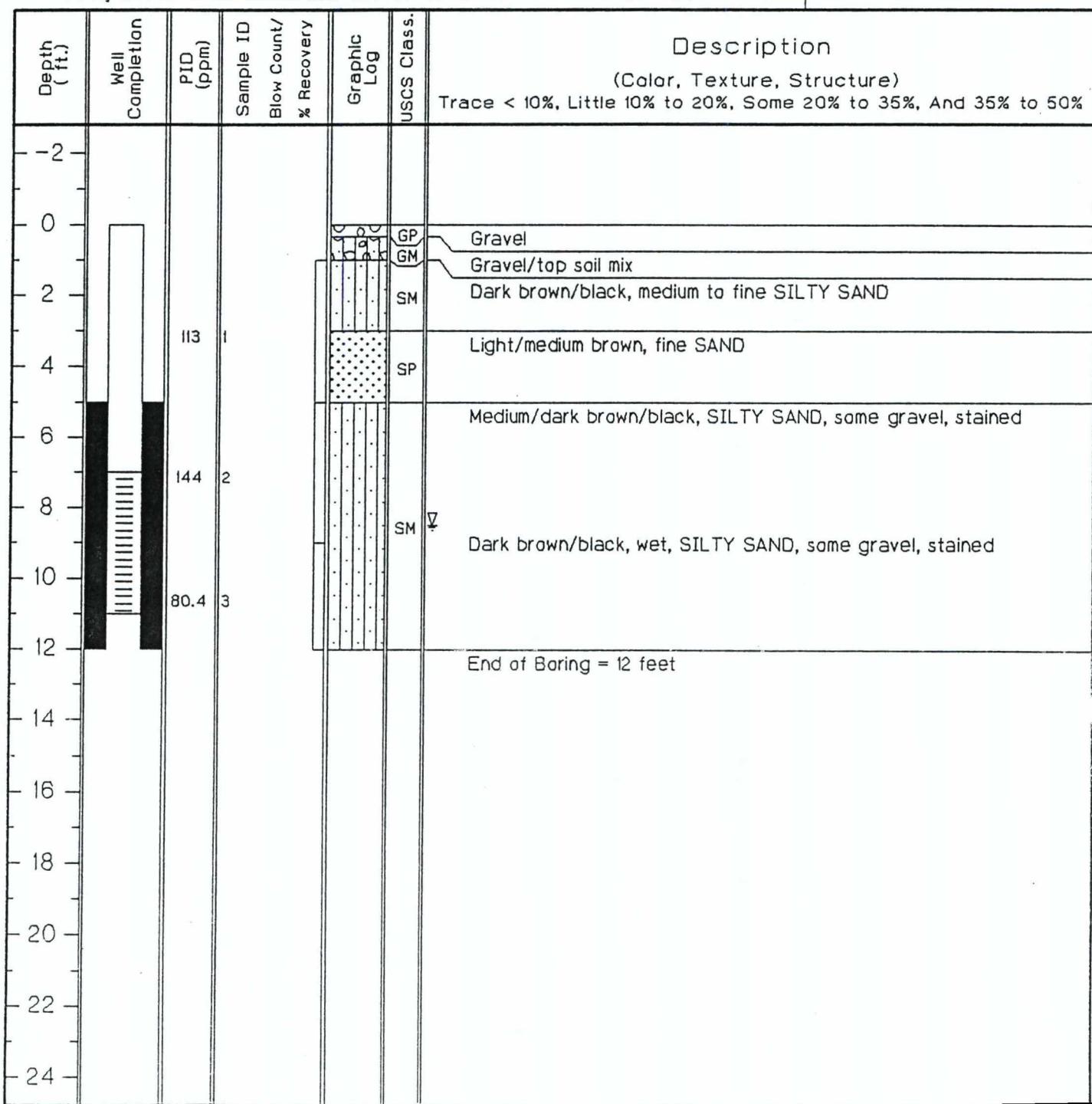
Monitoring Well GP-6

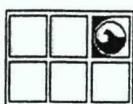
Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 8.5 ft. Static _____
Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
Casing: Dia 2 in. Length 7 ft. Type Steel
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/11/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.





GROUNDWATER
TECHNOLOGY

Drilling Log

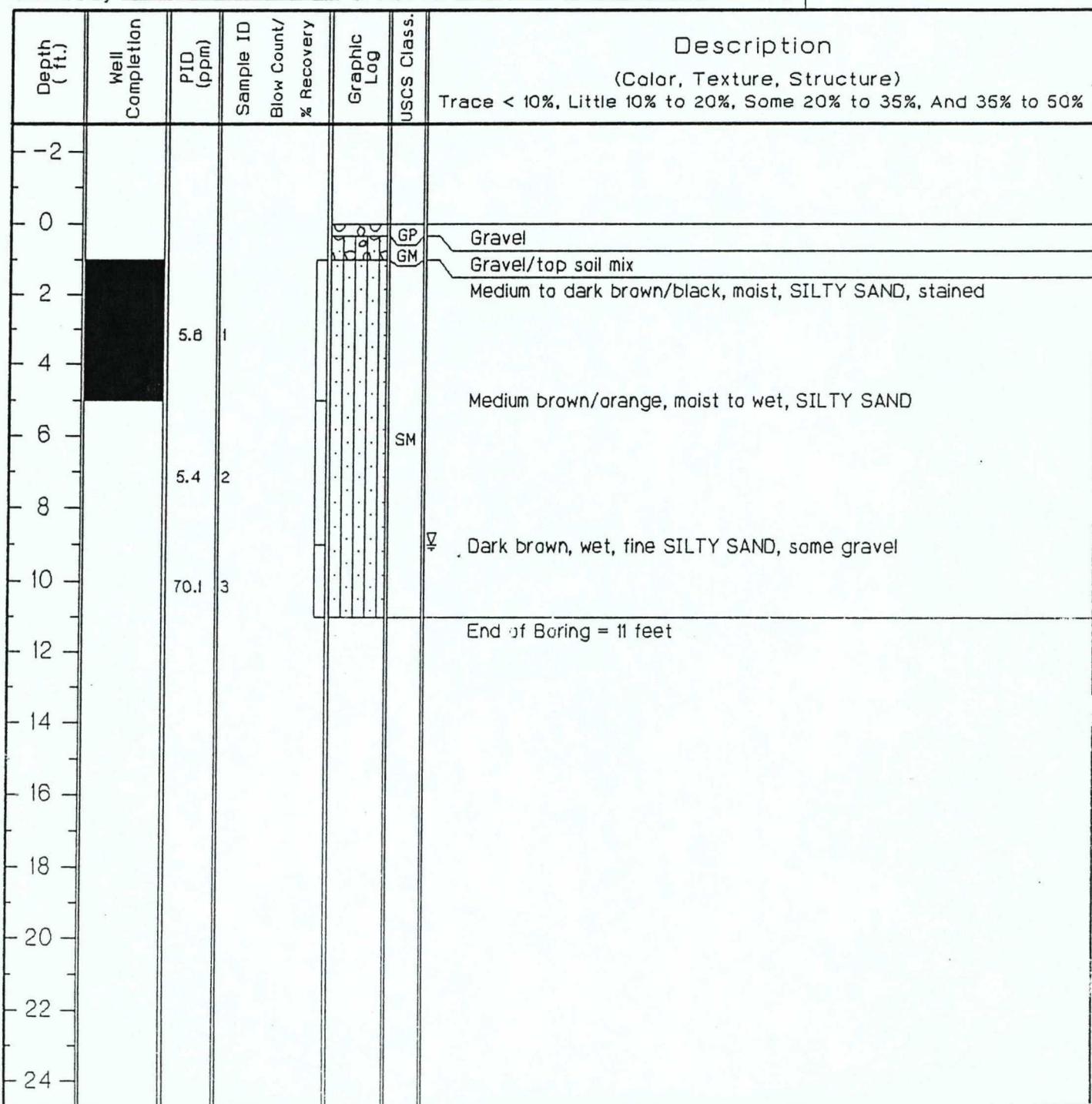
Monitoring Well GP-7

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 11 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 9 ft. Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/11/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.





GROUNDWATER
TECHNOLOGY

Drilling Log

Monitoring Well GP-8

Project Conrail-Botsford Yard Owner Conrail

Location Kalamazoo, MI Proj. No. 04002-0323

Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.

Top of Casing _____ Water Level Initial 8 ft. Static _____

Screen: Dia _____ Length _____ Type/Size _____

Casing: Dia _____ Length _____ Type _____

Fill Material _____ Rig/Core Geoprobe

Drill Co. Terra Trace Method Geoprobe

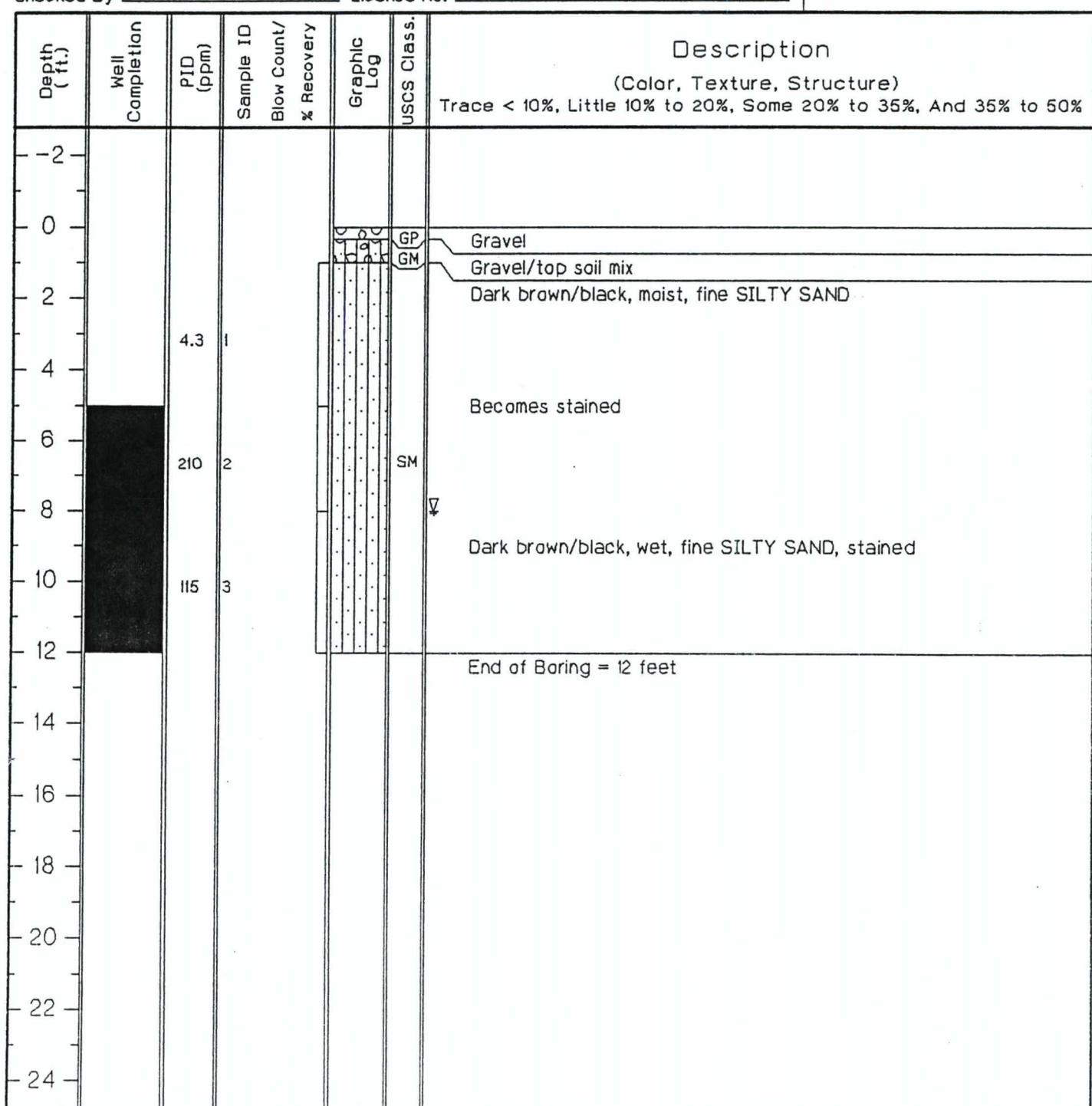
Driller D. Burket Log By T. Budrick Date 12/11/95 Permit # _____

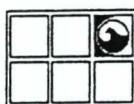
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.





GROUNDWATER
TECHNOLOGY

Drilling Log

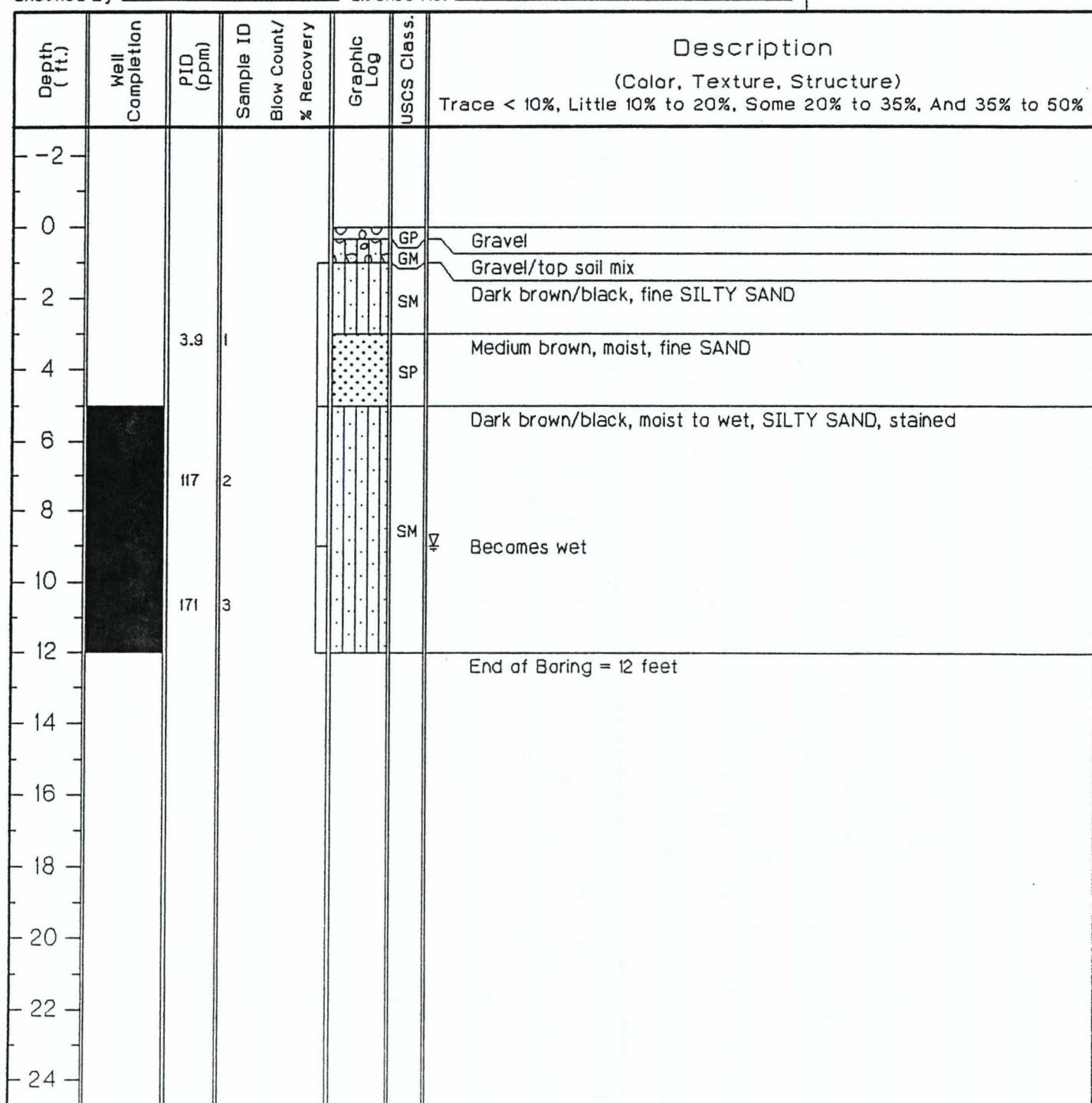
Monitoring Well GP-9

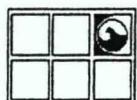
Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 9 ft. Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/11/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.



GROUNDWATER
TECHNOLOGY

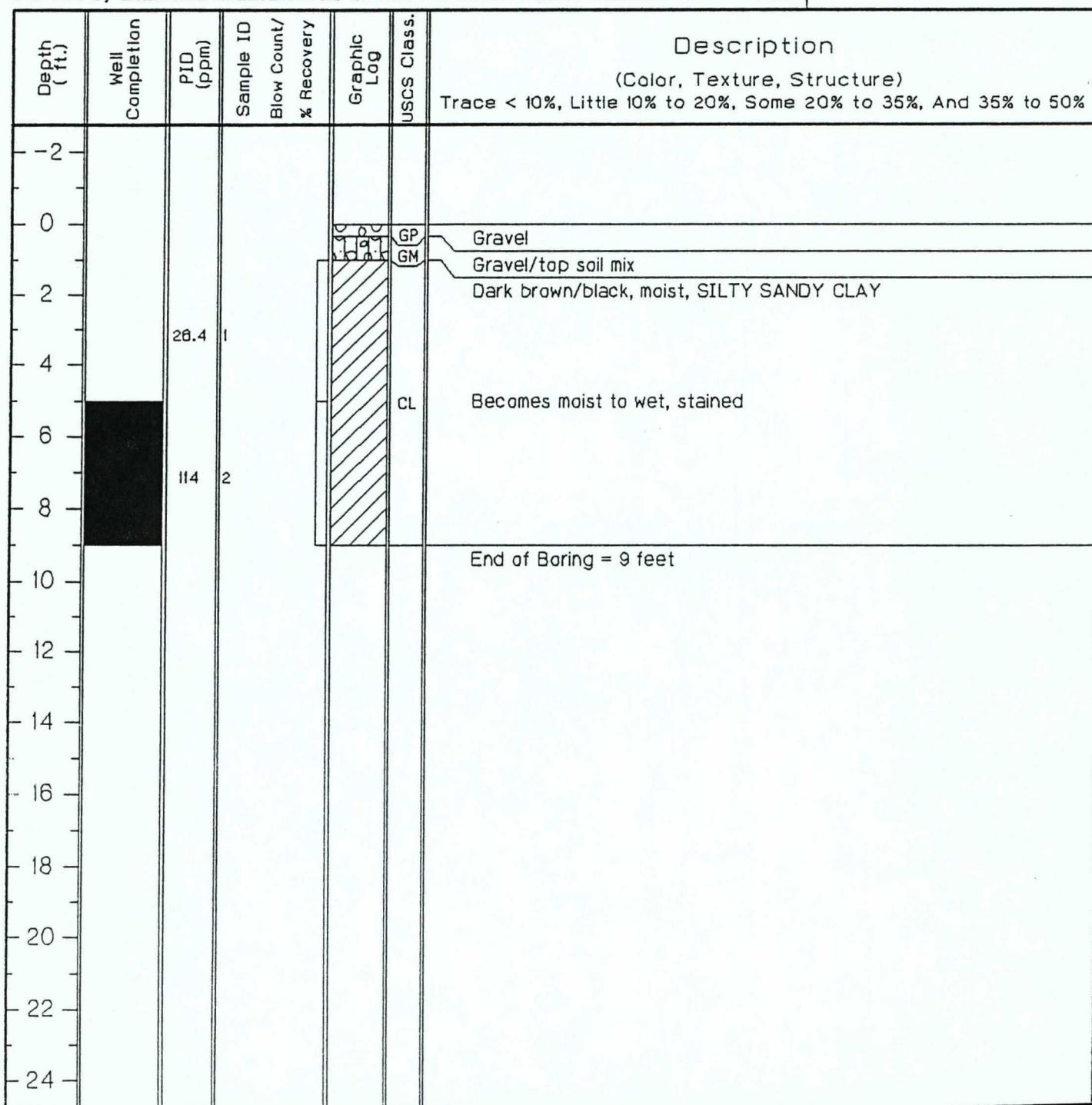
Drilling Log

Monitoring Well GP-10

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 9 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/12/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.



GROUNDWATER
TECHNOLOGY

Drilling Log

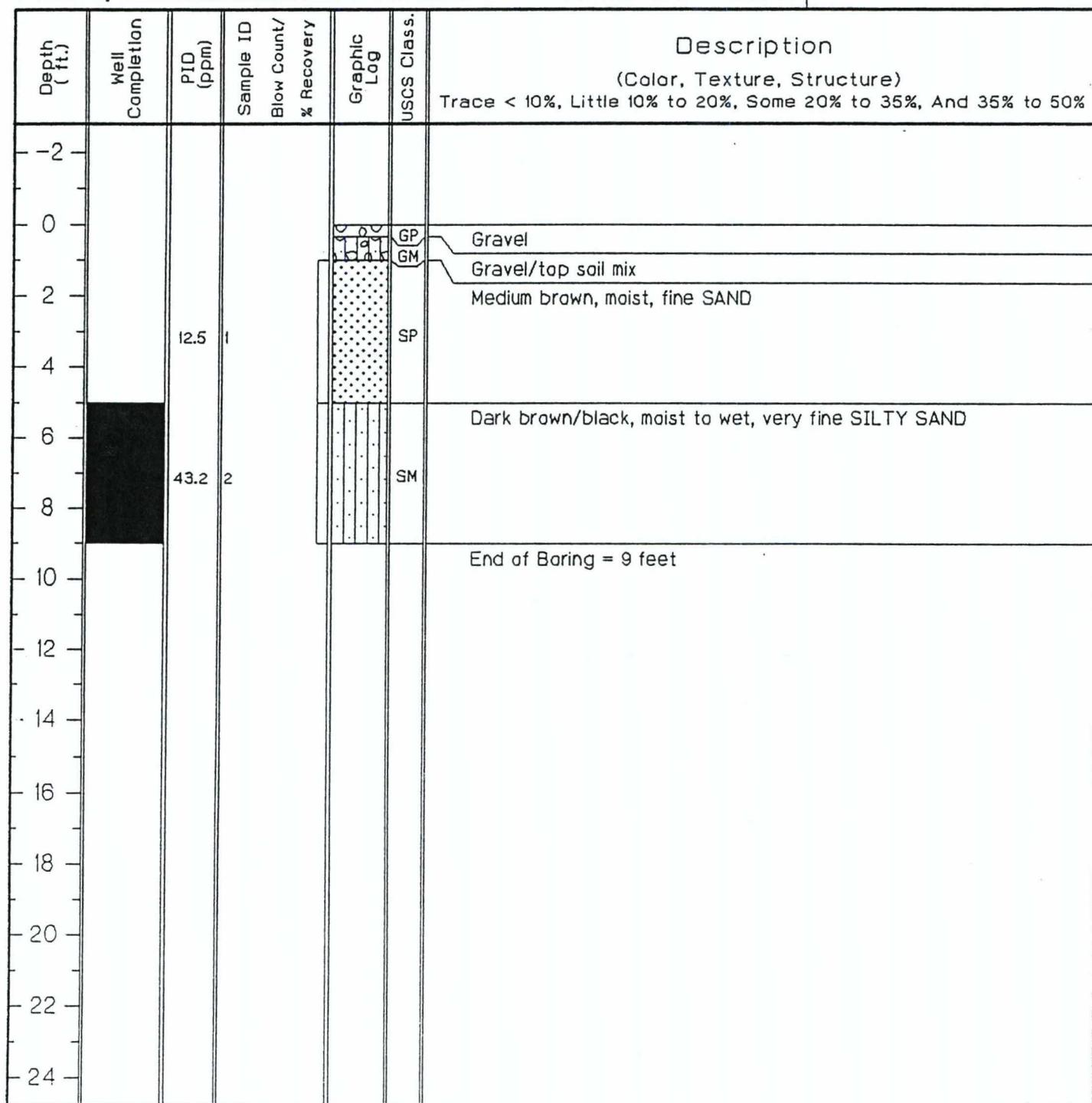
Monitoring Well GP-11

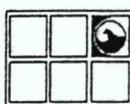
Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 9 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/12/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.



GROUNDWATER
TECHNOLOGY

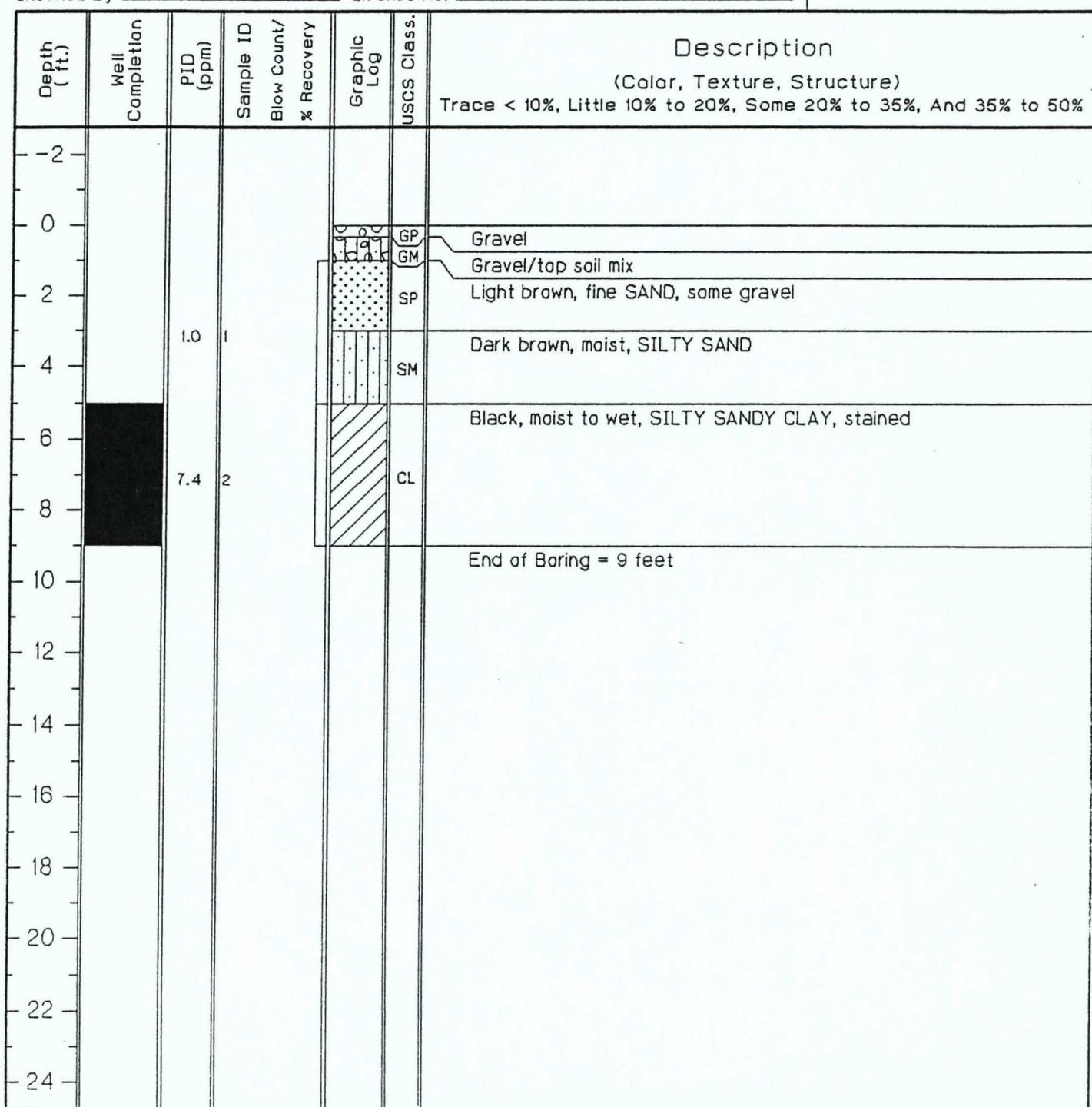
Drilling Log

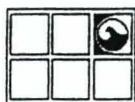
Monitoring Well GP-12

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 9 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/12/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.

GROUNDWATER
TECHNOLOGY

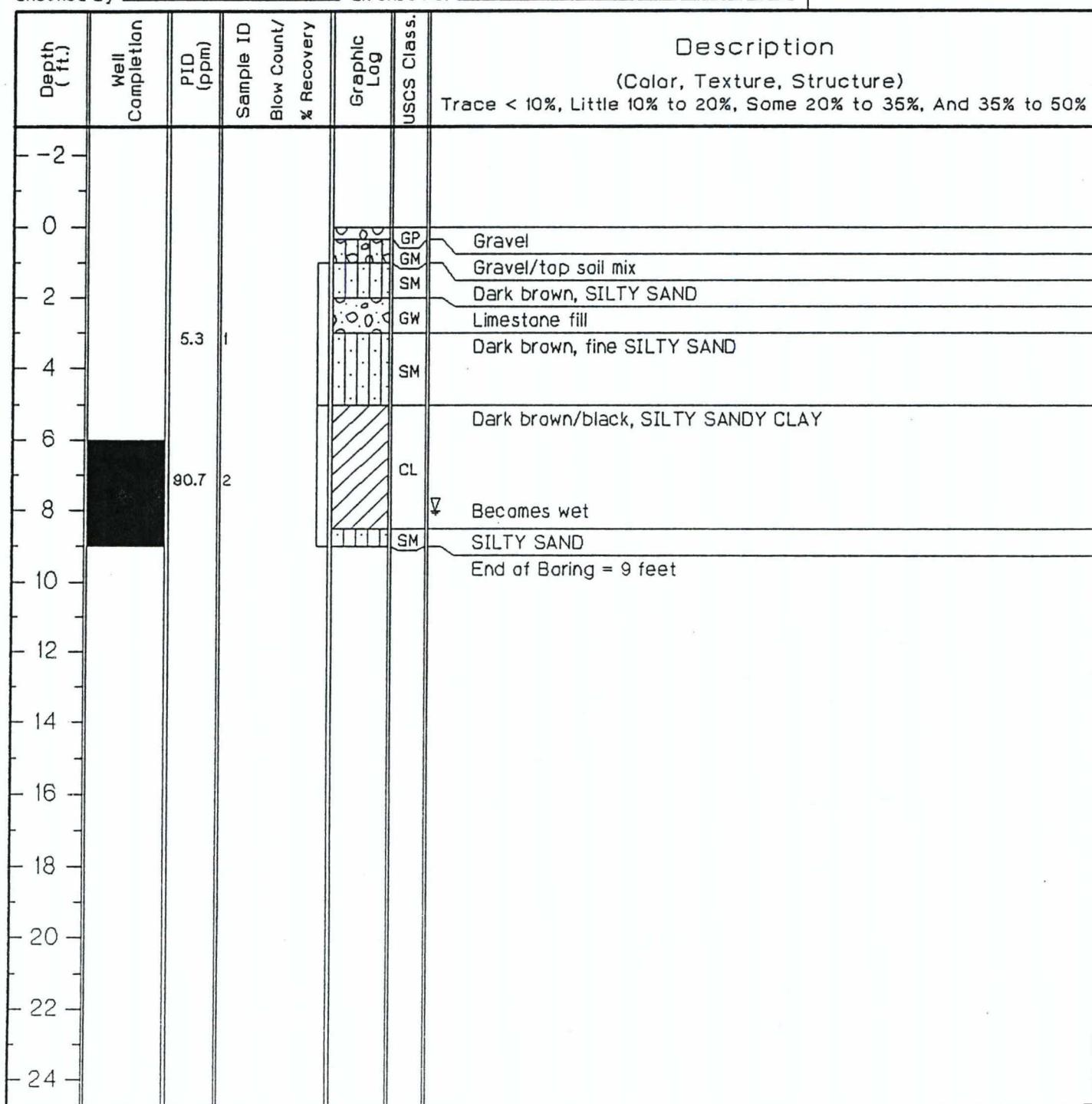
Drilling Log

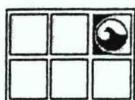
Monitoring Well GP-13

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 9 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 8 ft. Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burket Log By T. Budrick Date 12/12/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness or
oil-stained soil.

GROUNDWATER
TECHNOLOGY

Drilling Log

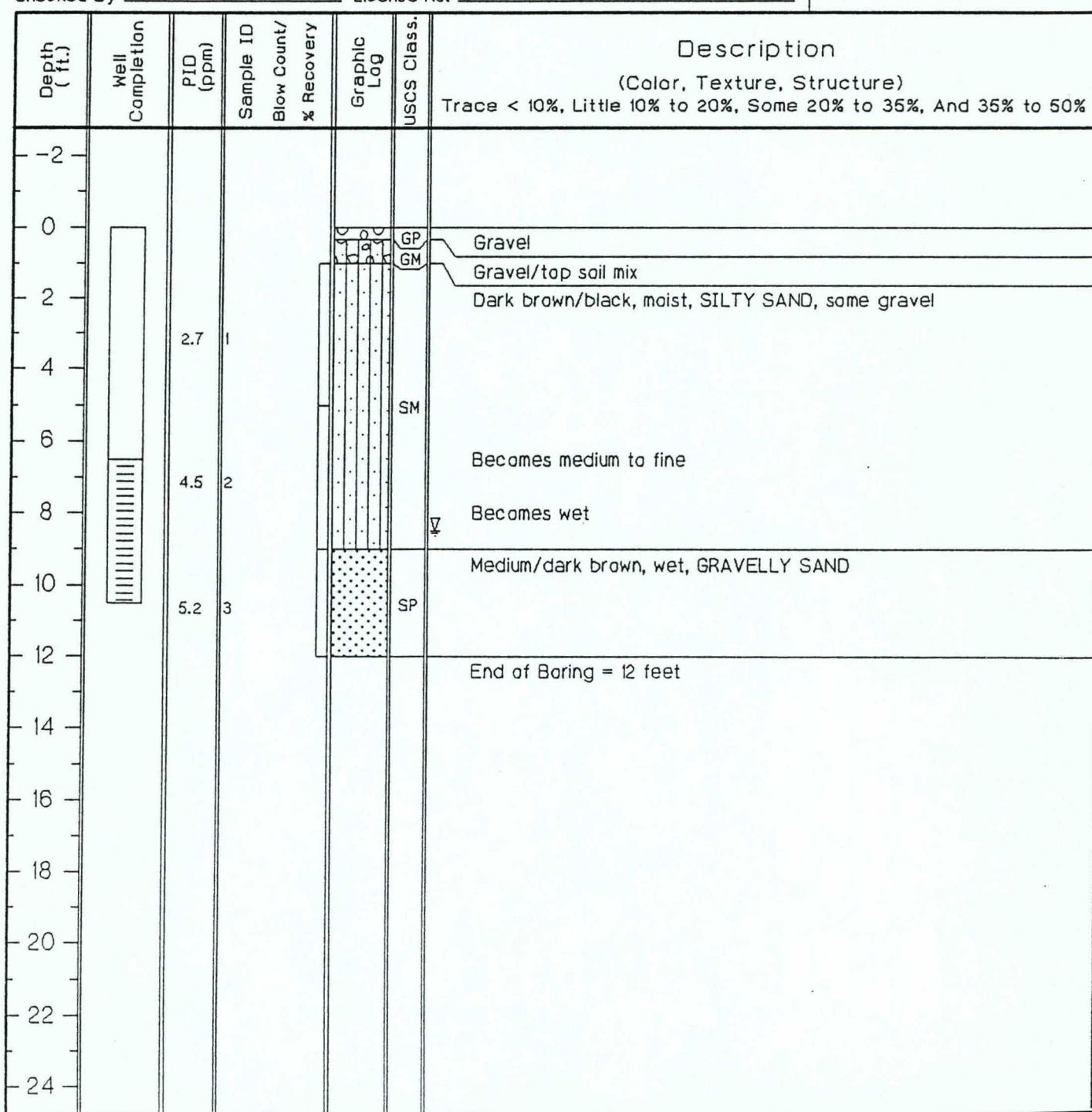
Monitoring Well GP-14

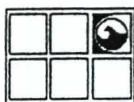
Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 8.5 ft. Static _____
Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
Casing: Dia 2 in. Length 6.5 ft. Type Steel
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/12/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.



GROUNDWATER
TECHNOLOGY

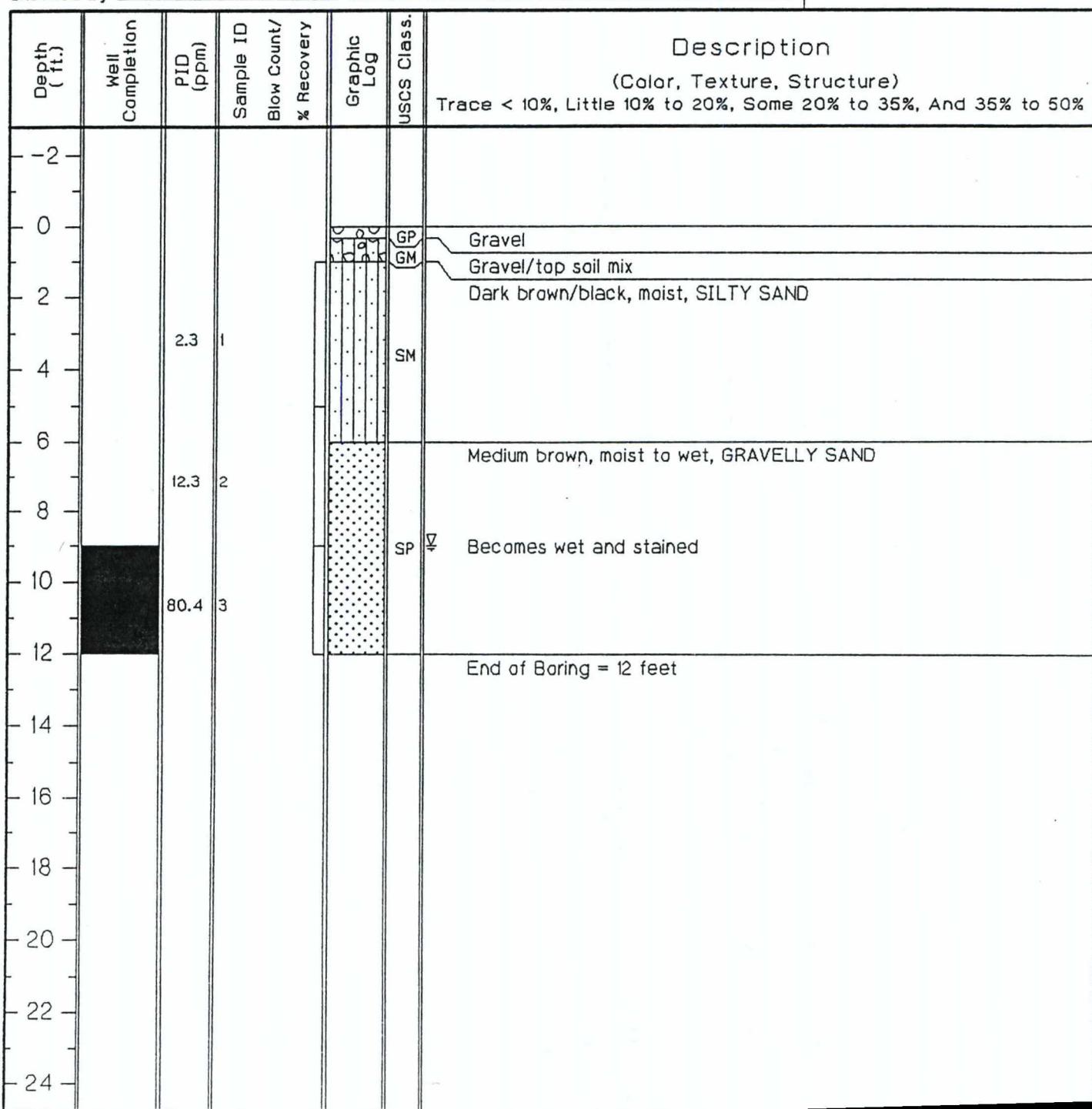
Drilling Log

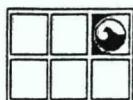
Monitoring Well GP-15

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 9 ft. Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/12/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.

GROUNDWATER
TECHNOLOGY

Drilling Log

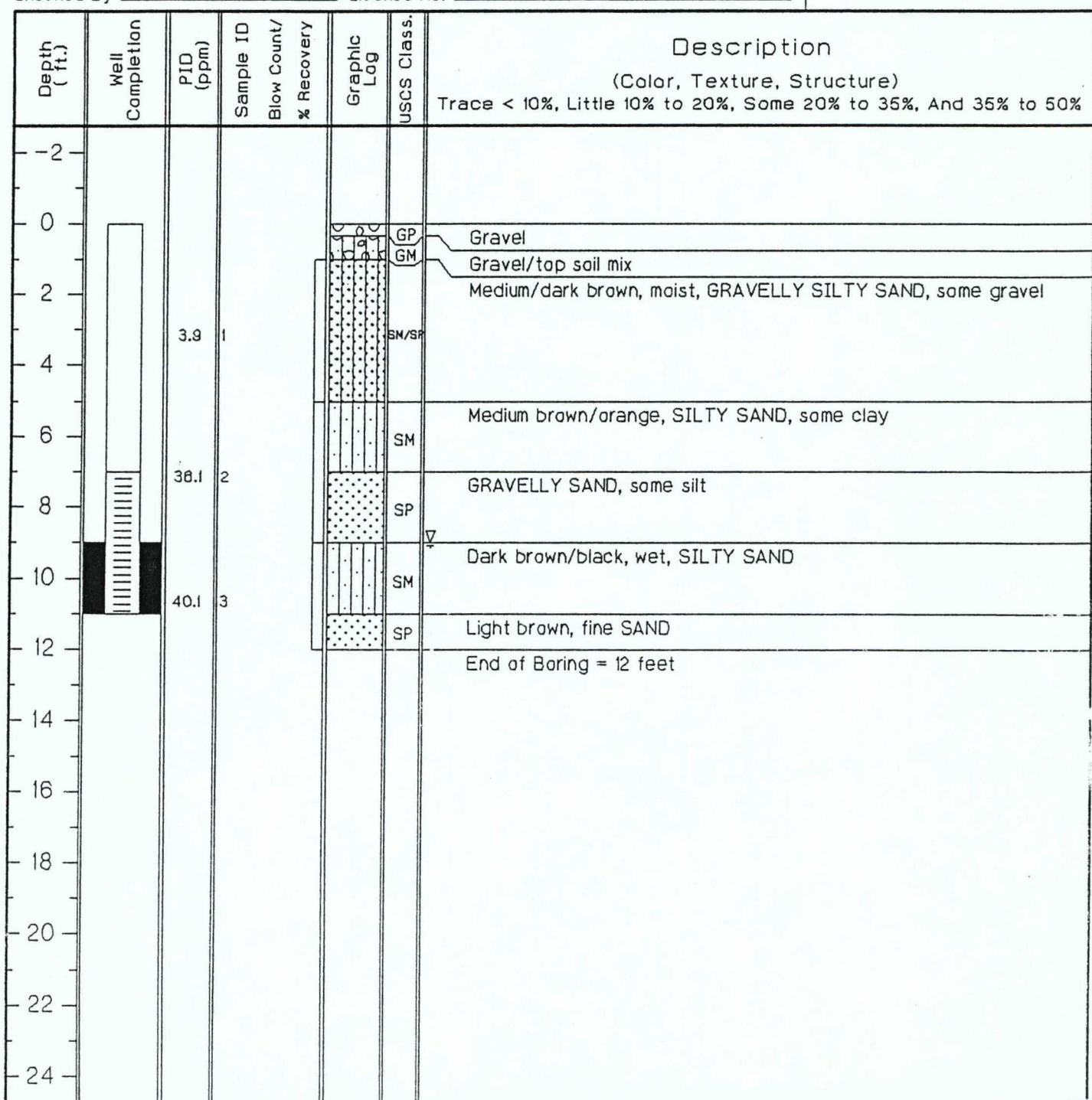
Monitoring Well GP-16

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 9 ft. Static _____
Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
Casing: Dia 2 in. Length 7 ft. Type Steel
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/12/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.





GROUNDWATER
TECHNOLOGY

Drilling Log

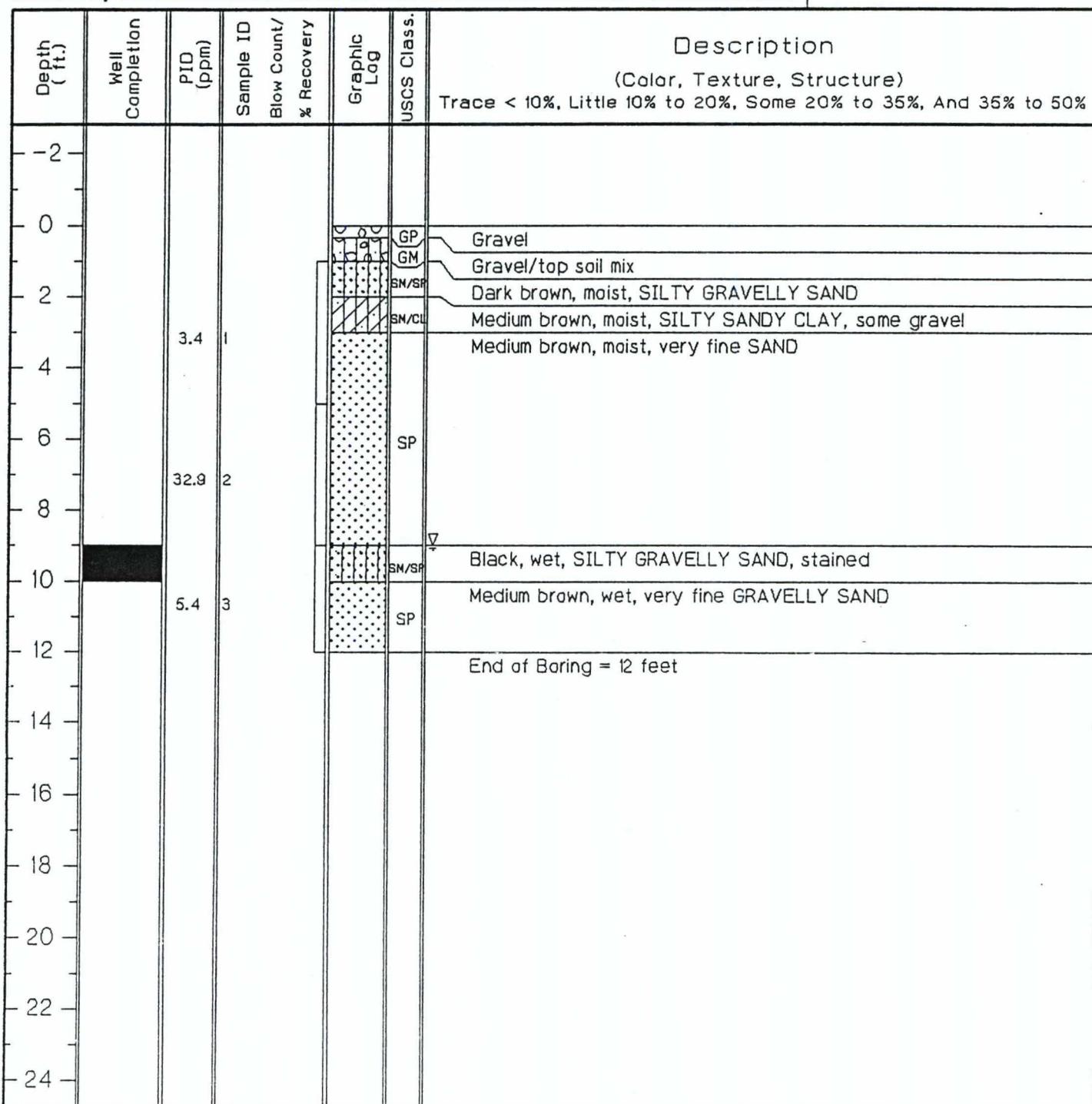
Monitoring Well GP-17

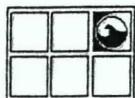
Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 9 ft. Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/12/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.





GROUNDWATER
TECHNOLOGY

Drilling Log

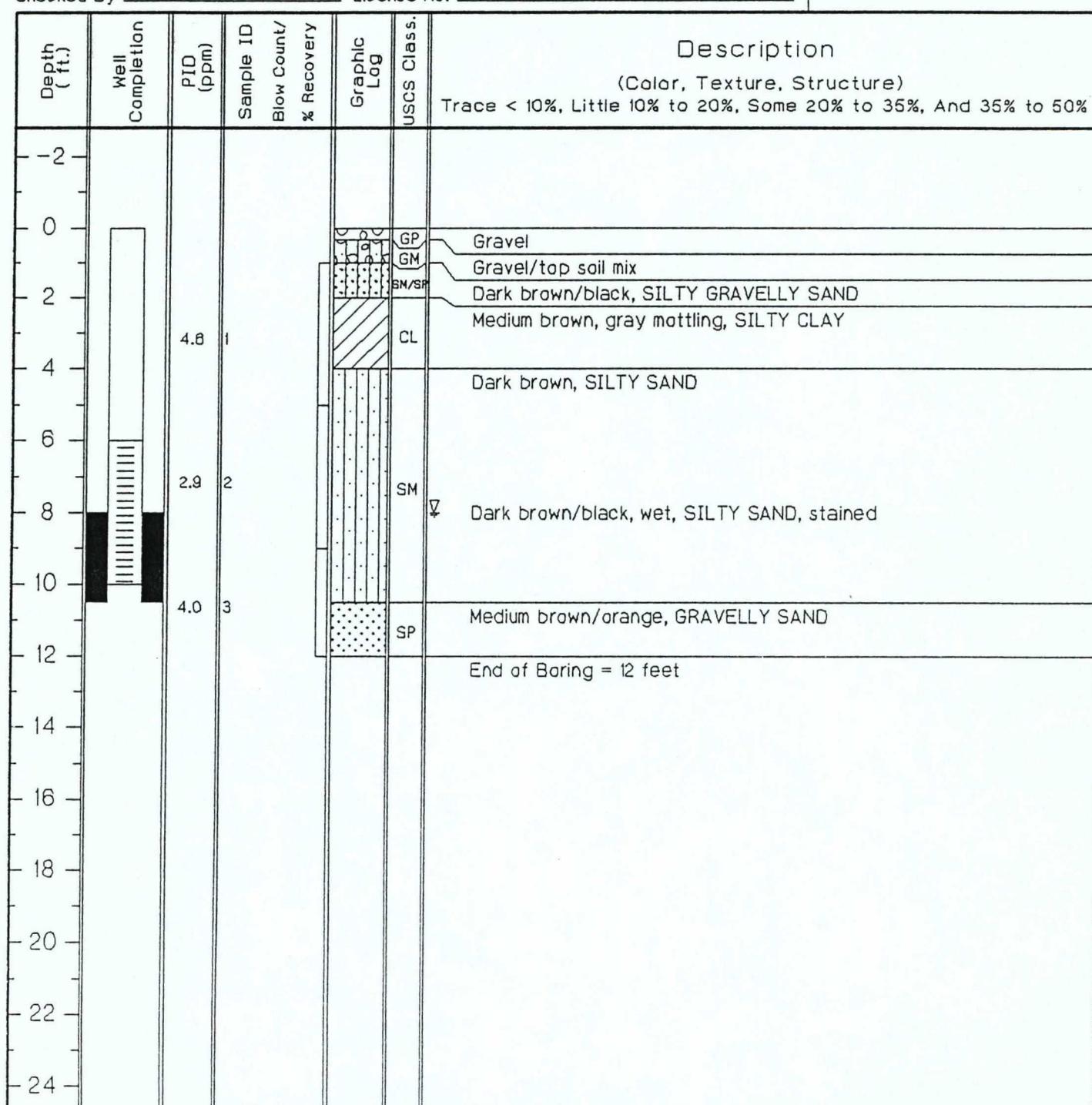
Monitoring Well GP-18

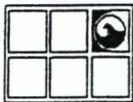
Project Conrail-Botsford Yard Owner Conrail
 Location Kalamazoo, MI Proj. No. 04002-0323
 Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
 Top of Casing _____ Water Level Initial 8 ft. Static _____
 Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
 Casing: Dia 2 in. Length 6 ft. Type Steel
 Fill Material _____ Rig/Core Geoprobe
 Drill Co. Terra Trace Method Geoprobe
 Driller D. Burket Log By T. Budrick Date 12/12/95 Permit # _____
 Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.





GROUNDWATER
TECHNOLOGY

Drilling Log

Soil Boring GP-19

Project Conrail-Botsford Yard Owner Conrail
 Location Kalamazoo, MI Proj. No. 04002-0323
 Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
 Top of Casing _____ Water Level Initial 8.5 ft. Static _____
 Screen: Dia _____ Length _____ Type/Size _____
 Casing: Dia _____ Length _____ Type _____
 Fill Material _____ Rig/Core Geoprobe
 Drill Co. Terra Trace Method Geoprobe
 Driller D. Burkett Log By T. Budrick Date 12/13/95 Permit # _____
 Checked By B. Bow License No. _____

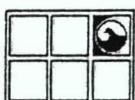
See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)	
						Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%	
-2							
0						Gravel	
0.5						Gravel/top soil mix	
1.0						Dark brown, moist, SILTY GRAVELLY SAND	
1.5						Medium brown, gray mottling, moist, SILTY CLAY	
2.0						Medium brown, moist, very fine SAND	
2.5							
3.0							
3.5							
4.0							
4.5							
5.0							
5.5							
6.0							
6.5							
7.0							
7.5							
8.0						Becomes wet	
8.5						Dark brown, wet, SILTY GRAVELLY SAND	
9.0							
9.5							
10.0							
10.5							
11.0							
11.5							
12.0						Medium brown, wet, fine SAND	
12.5							
13.0							
13.5							
14.0							
14.5							
15.0							
15.5							
16.0							
16.5							
17.0							
17.5							
18.0							
18.5							
19.0							
19.5							
20.0							
20.5							
21.0							
21.5							
22.0							
22.5							
23.0							
23.5							
24.0							

End of Boring = 12 feet

GROUNDWATER
TECHNOLOGY

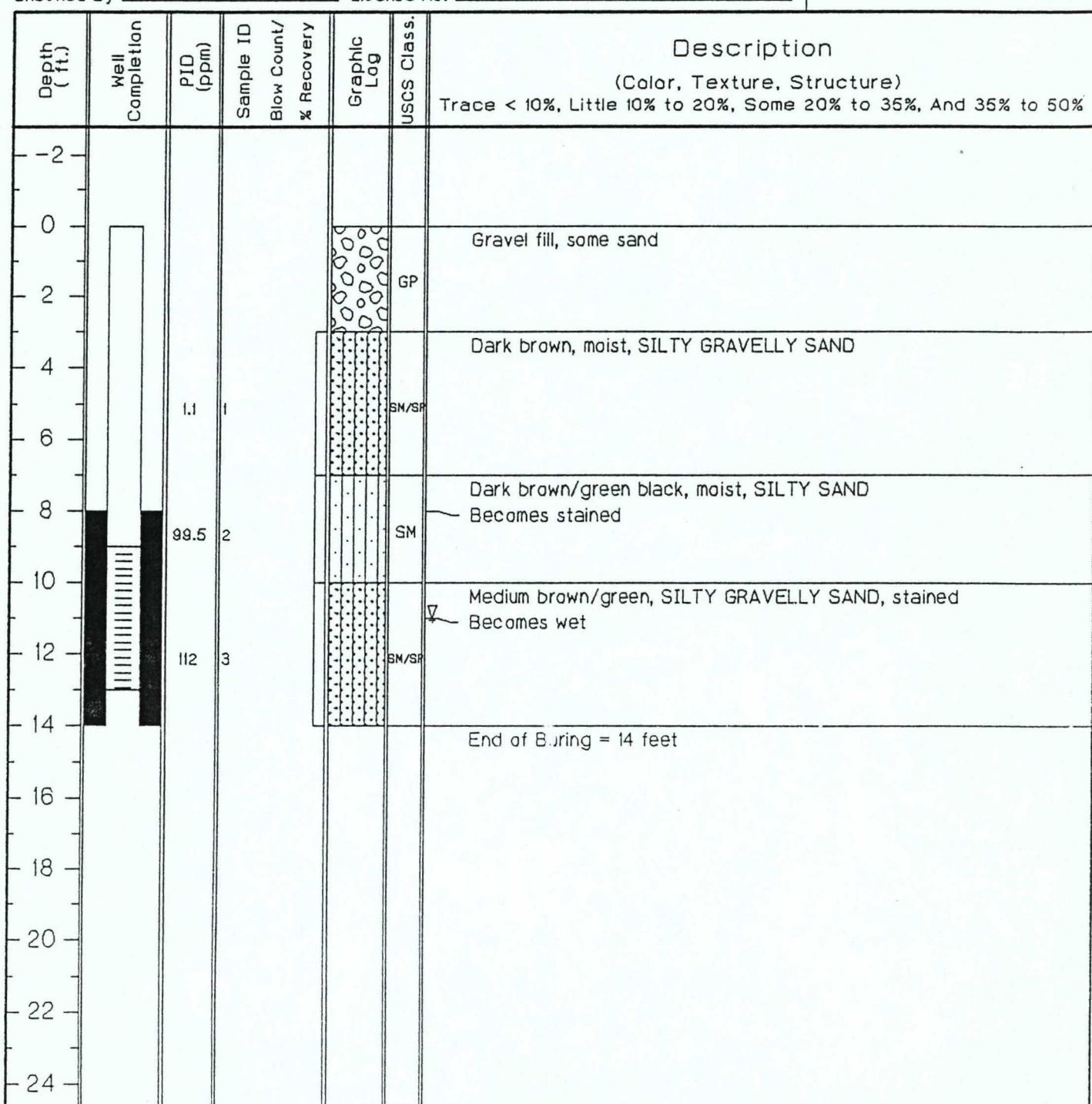
Drilling Log

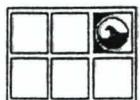
Monitoring Well GP-20

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 14 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 11 ft. Static _____
Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
Casing: Dia 2 in. Length 9 ft. Type Steel
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/13/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of
oil-stained soil.

GROUNDWATER
TECHNOLOGY

Drilling Log

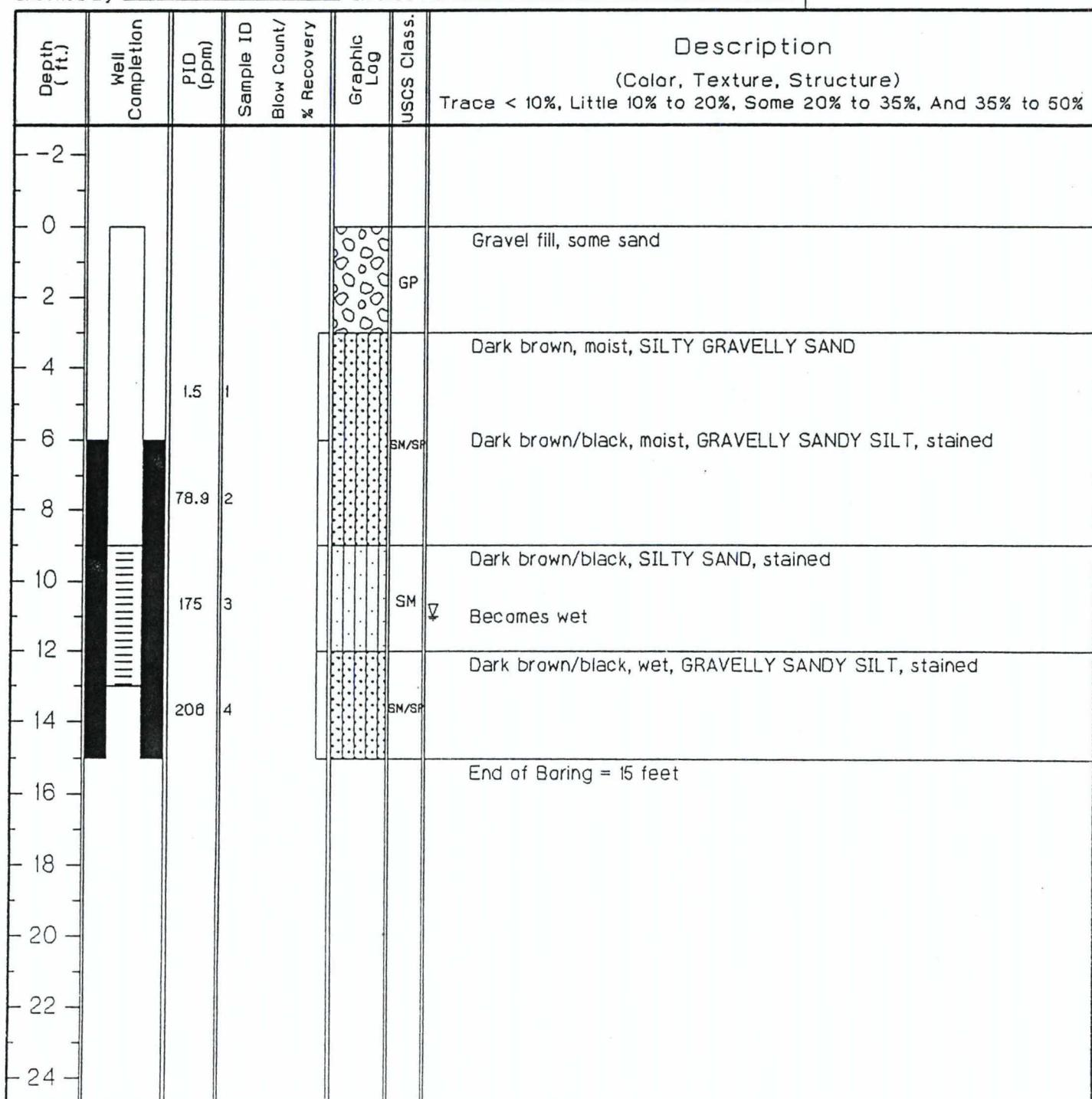
Monitoring Well GP-21

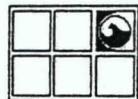
Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 15 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 11 ft. Static _____
Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
Casing: Dia 2 in. Length 9 ft. Type Steel
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/13/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.





GROUNDWATER
TECHNOLOGY

Drilling Log

Monitoring Well GP-22

Project Conrail-Botsford Yard Owner Conrail
Location Kalamazoo, MI Proj. No. 04002-0323
Surface Elev. _____ Total Hole Depth 12 ft. Diameter 2 in.
Top of Casing _____ Water Level Initial 7 ft. Static _____
Screen: Dia 2 in. Length 4 ft. Type/Size Stainless Steel/0.010 in.
Casing: Dia 2 in. Length 7 ft. Type Steel
Fill Material _____ Rig/Core Geoprobe
Drill Co. Terra Trace Method Geoprobe
Driller D. Burkett Log By T. Budrick Date 12/13/95 Permit # _____
Checked By B. Bow License No. _____

See Site Map
For Boring Location

COMMENTS:

Well completion column shows thickness of oil-stained soil.

